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This report on Federal funds for education includes data presented by field of study, academic level, and number and kind of recipients. The report is concerned with amounts for programs providing Federal funds or services to educational institutions and agencies or support for education and training to educational institutions, agencies, or individuals. The totals include grants, payments, loans of money, the value of property and commodities transferred to educational institutions and agencies, and funds for the operation of Federal educational institutions. Data were furnished by Federal departments and agencies in response to a questionnaire from the Office of Education.

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OE-10013

*ederal Funds for Education*

# fields
# levels
# recipients

*1959 and 1960*

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Office of Education

000277

# Highlights

## Federal Funds for Education in Fiscal Year 1960

**FEDERAL FUNDS FOR EDUCATION** include amounts for programs which provide (1) funds or services to educational institutions and agencies or (2) support for education and training to educational institutions, agencies, or individuals. The totals include grants, payments, and loans of money, the value of property and commodities transferred to educational institutions and agencies, and funds for operation of Federal educational institutions.

These funds serve major national health, welfare, and defense purposes. They may provide funds for education and training or pay for services purchased by the Federal Government with no direct benefit to the educational institutions concerned. Only a part of the funds can be considered to represent a Federal contribution to the financing of education, although all of them channel Federal funds, property, and services to educational institutions and agencies and to individuals for education and training, or provide directly administered Federal educational programs.

*Summary*

| *Type of program, by level* | *Amount in thousands* |
|---|---|
| *Elementary-secondary Education* | 844, 723 |
| Grants and payments [1] | 751, 371 |
| Directly administered programs | 86, 152 |
| Loans | 7, 200 |
| *Higher Education* | 770, 403 |
| Grants and payments | 459, 317 |
| Directly administered programs | 51, 467 |
| Loans [2] | 259, 619 |
| *Adult Education* | 234, 748 |
| Grants and payments | 222, 405 |
| Directly administered programs | 12, 343 |
| *Research and Research Facilities* [3] | 431, 437 |
| Grants and payments | 431, 437 |
| *Not Elsewhere Classified* | 412, 385 |
| Grants and payments | 32, 236 |
| Directly administered programs | 60, 649 |
| Original cost of surplus property transferred [4] | 319, 500 |

[1] Includes $306.5 million in payments for School Lunch Program and $83.5 million in payments from public land revenue for roads and schools as determined by State legislatures. Estimate of public land revenue for public school use is 50 percent.

[2] Includes college housing loans of $250 million reported on the basis of funds authorized in fiscal year 1960. Actual loans approved were $172 million.

[3] Data incomplete.

[4] Estimated actual value at time of transfer may in some instances be as little as five percent of original cost.

NOTE: Grants and payments to States, institutions, or individuals are included.

R-6-10

OE-10013
Circular No. 679

8099

# *Federal Funds for Education*

# fields levels recipients

## *1959 and 1960*

*By* Penrose B. Jackson
*Specialist, Federal Funds for Education*

Dolores A. Steinhilber
*Research Assistant*

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Abraham Ribicoff, *Secretary*

Office of Education
Sterling M. McMurrin, *Commissioner*

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# Foreword

THIS REPORT, continuing a series on *Federal Funds for Education*, will for the first time present data on Federal programs which provide funds for educational activities by fields of study, academic levels, and kinds and numbers of recipients. The Federal Funds for Education reports have for many years described Federal programs which provide money, property, or commodities for educational activities.

In recent years the need for additional data has developed among Federal, State, and local education agencies, legislative bodies, and persons concerned with planning and administering Federal educational activities or evaluating their impact on financing education and on developing the manpower resources of the Nation. On the basis of mutual interests and responsibilities and in recognition of the established program of the Office of Education in this area, the National Science Foundation made arrangements with the Office of Education to expand its activities in this field to include new data to meet current needs. Under these arrangements the National Science Foundation provided assistance in financing and planning the survey on which this report is based.

The data on Federal programs providing funds for education were provided by Federal departments and agencies in response to requests for such data from the Office of Education. The officials of these departments and agencies not only provided the requested data, but also offered many helpful suggestions for the classification and analysis of the data.

The Office is aware that considerable refinement of the data-collection and classification processes is required in order to enhance the usefulness and reliability of future studies on Federal funds for education. In time, those studies hopefully will reflect more rigorous definitions of what might properly be considered "funds for education." The present study includes numerous examples of such Federal expenditures as the School Lunch Program, Surplus Property Disposal Program, Military Academies, Mine Safety Program, and Civil Defense Training Program. Many observers may reasonably question whether the purposes of such programs are primarily "educational."

In order to provide a fuller picture of Federal assistance to education it will be necessary in subsequent editions of this study to clarify distinctions between grants and loans, between authorizations and actual expenditures, and between services and facilities and actual cash.

The Office of Education hopes that the present publication will help develop an understanding of the important role played by the Federal Government in strengthening American education.

**Peter P. Muirhead**
*Assistant Commissioner for*
*Program and Legislative Planning*

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## Section I

# Federal Educational Activities

SUPPORT OF EDUCATION is basically the responsibility of State and local governments. The Federal Government, however, has from its earliest days been concerned with improving educational services. It has through the years developed a variety of programs which have helped support, in one way or another, educational activities of the States and of educational institutions. These programs serve a number of purposes. They may be for the purchase of research and training services of educational institutions in the interest of national welfare and defense, for support of individuals for whom there is a special Federal responsibility, for support of schools in areas where Federal activities would result in undue burdens on school services without such support, for support of education in special areas such as vocational education, or for other purposes. Regardless of the specific purpose involved, these programs affect the financing of educational programs and services and the development of the manpower resources of the Nation.

## Scope of Report

In recent years there has been increasing concern with the development of the manpower resources of the Nation, particularly in the sciences. A major part of the Nation's resources for manpower development consists of its educational institutions. Federal programs which affect the financing of education also affect manpower development. Because of these relationships, the Office of Education and the National Science Foundation agreed to provide joint support for the expansion of the Office of Education surveys and reports on Federal activities in education to include data on Federal programs by fields of study, academic levels, and numbers and kinds of recipients. The purpose of this cooperative effort was to continue the development of reports on the impact of Federal programs on education and manpower development.

This report is concerned with the amount of Federal funds for education by fields of study and academic levels and with the kinds and numbers of recipients of such Federal funds. These amounts include, for the purposes of this study, funds or the value of equipment and commodities and the costs of providing educational services provided by Federal agencies for educational institutions and agencies or individuals for educational purposes. The amounts may be in the form of grants, payments, or loans to State and local governments and to educational institutions and agencies or in the form of payments to individuals.

The data for this report were provided by Federal departments and agencies in response to a questionnaire sent to them by the U.S. Office of Education.[1] Responses to Part I of the questionnaire provided information on Federal educational programs for the Office of Education publication, *Federal Funds for Education, 1958–59 and 1959–60;* and the responses to part II provided data on the same programs in greater detail for this study. Basic terminology used throughout this report is explained below.

## Basic Terminology

### Program and Activity

A "program" is the organizational arrangement within an agency for the accomplishment of a mission of the agency. A program may be identified in terms of the statute which authorized it, in terms of purpose, or in terms of an organizational unit. It may be defined narrowly to include working arrangements for a specific purpose, or defined broadly to include all the arrangements for accomplishment of a more general mission of the agency. The program titles provided by the agencies in the questionnaires were adjusted by the Office of Education when necessary for ease in identification and convenience in classification. In all cases, however, essential elements of the agencies' terminology were retained.

---

[1] The questionnaire and instructions for its use are reproduced in app. B.

That part of a Federal program which applies to one field of study, one academic level, and one kind of recipient is defined as an activity. An educational program might involve one activity or a number of activities.

## Field of Study

Each activity in an educational program concerns one of the fields of study listed in the questionnaire: agricultural sciences, biological sciences, clinical sciences, education, engineering, physical sciences, social sciences, and other fields or combination of fields. In addition, the questionnaire provided two categories for activities which could not be classified in one of those areas: "General education" for those providing funds for general academic programs and "Not applicable" for those providing funds for educational services and administration.

## Academic Level

Each activity concerns one academic level and is classified in one of the following categories: postdoctoral, graduate, undergraduate, adult education, elementary-secondary, or "other." Some programs, however, are concerned with more than one academic level and cannot be broken down into specific levels; other programs, such as research grants and contracts and distribution of surplus property, cannot be identified with academic levels; and others involve training of individuals at one level for an educational activity at another level.

The instructions for the questionnaire requested that the responding agencies determine the academic-level classification on the basis of the level of the federally supported training of individual participants. Thus, training of elementary-secondary teachers at the graduate level was classified as graduate. The support of educational programs and of individuals in professional schools was classified at the graduate level if the responding agencies considered the programs and the individuals concerned to be at this level.

## Recipients

The questionnaire asked for the number of recipients in each of the activities reported. It also requested that the kind of recipient in each activity be identified and that individual recipients be reported where possible. For some activities, however, the reporting agencies had no basis for estimating the number of individuals receiving assistance or participating in educational activities supported by Federal funds. In such cases the recipient was necessarily identified as a school, university, State, or other appropriate entity.

Individuals may be direct recipients of Federal funds in some programs and participants in programs supported by Federal funds in others. The kinds of individual recipients identified by the respondents are classified for this report as follows:

> *Graduate students.*—Students studying in academic areas beyond the bachelor's degree are classified as graduate students. They may be in full- or part-time educational programs. Students beyond the bachelor's degree and working for the first professional degree are included here.
>
> *Undergraduate students.*—Students enrolled in educational programs at the undergraduate level and reported as direct recipients, or students participating in programs at this level supported by Federal funds (indirect recipients) are reported as undergraduate students.
>
> *Professional trainees.*—Persons engaged in advanced training in a specialized field rather than for an advanced academic degree are classified as professional trainees.
>
> *Nonacademic trainees.*—Persons engaged in technical, nonprofessional training at the adult-education level are classified here.
>
> *Elementary-secondary students.*—Pupils in the elementary and secondary schools in programs supported by Federal funds are reported in this category.
>
> *Teachers.*—Individual recipients in this category are persons engaged in teaching who are recipients of grants for this purpose.
>
> *Other individuals.*—Individual recipients included here are housewives in home economics adult-education classes, persons enrolled in law enforcement training programs, military personnel in off-duty educational programs, and others not classified in the preceding categories.

Special tabulations of amounts of support by field of study, agency, and program are presented for graduate and undergraduate students and professional personnel in table A-19 through A-21 (pp. 77-81).

### Financial Data

The financial data are based on agency reports of actual expenditures for fiscal year 1959 and estimated expenditures for fiscal year 1960. Estimates for 1960 will be revised to reflect actual expenditure levels in the next report in this series.

## Types of Programs

Federal funds for education, as defined for this report, serve a variety of purposes but channel Federal funds, commodities, and services through educational institutions and agencies directly or through individuals. These programs may be classified in many ways. In terms of major Federal purposes, only a few programs would be considered aid to education. But programs may be viewed as providing funds for education when loans, grants, or services are provided to educational institutions and agencies or when the education and training of individuals is supported.

For purpose of analysis in this study, programs are classified on the basis of major types of direct support of education for individuals or support of instruction through grants to educational institutions and agencies. Research programs and programs providing facilities or equipment for educational institutions and agencies are also identified. The categories used in classifying these programs are discussed in the paragraphs immediately following. Amounts of support by type of program and the number of individual recipients in fellowship, traineeship, training grant, and teaching grant programs are discussed by field of study in section 2.

### Research

Research grants and contracts involving transfer of Federal funds to educational institutions and agencies or to individuals in educational institutions and agencies are included in the data on research. Federal agencies were requested to include grants and contracts to both educational institutions and research centers associated with them.[2] The amounts reported include both basic research grants and contracts for research services. Amounts by agency and program are listed in table A-2, (p. 66).

### Fellowships

Study grants under the Educational Exchange Program and regular and research fellowship programs of other agencies are included in the data on fellowships. Amounts by agency and program appear in table A-3 (p. 66).

### Traineeships

Direct traineeships are listed by agency and program in table A-4 (p. 66). Programs providing direct assistance to individuals for specialized training are included in this category.

### Training Grants

Programs of Federal assistance to educational institutions and agencies for support of training programs and contracts for the conduct of training programs are included as training grants throughout this study. Table A-5 (p. 66) provides data on amounts by agency and program.

### Facilities

Programs providing educational facilities or equipment through grants, loans, or transfer of real or personal property to educational institutions are reported as facilities. Amounts for programs are reported in table A-6 (p. 67).

### Military Personnel

Programs providing education and training in educational institutions for military and Coast Guard personnel are included in this category. Expenditures for support of the military and Coast Guard academies are also included. These programs are listed in table A-7 (p. 67).

### Federal Employees

Outservice training of Federal employees in educational institutions is included in this category. Expenditures by agency and program are reported in table A-8 (p. 67).[3]

---

[2] For discussion of limitations on research data, see "Problems of Reporting", p. 4, and the discussion on "Limitations of Data" in appendix A, p. 48.

[3] See the discussion on "Limitations of Data" in appendix A, p. 48 for additional comments on these data.

### Teaching Grants

Grants to individuals for actual teaching are listed as teaching grants. Such grants are made under the Educational Exchange Program to both university and elementary-secondary teachers.

### Other

Programs not elsewhere classified are included in this category. These programs are identified according to purpose in the tables and in the discussions on data by type of program in section 2.

## Problems of Reporting[4]

There are many ways to look at Federal activities in education. This report is concerned with those activities which put Federal funds into educational institutions and agencies, provide individuals with Federal funds for educational purposes, or support educational programs in other ways. (See the survey forms in app. B for more details on the criteria for reporting.) Since Federal programs which fall within the criteria for the survey serve various purposes, it proved difficult in some cases to make clear the intended scope of the term "Federal funds for education." Funds for education in the broad sense just described include programs which would not be included in a report on direct Federal aid to education. The broader concept of Federal funds for education is not limited by the specific Federal purpose involved or the method of providing such funds. It is limited, rather, by the flow of Federal funds, goods, or services to educational institutions and agencies or to individuals for support of their education and training.

Most Federal activities which fall within the criteria established for the survey, it is believed, are included in the data presented in this report. In a few areas, however, the concept of Federal funds for education was interpreted by the responding agencies to exclude certain programs which provide funds for research and research facilities on the basis that these programs were for specific purposes other than the support of education. The data on funds for research in educational institutions and research centers associated with them, therefore, are incomplete. Research grants and contracts of the National Institutes of Health, Small Business Administration, Federal Aviation Agency, Office of Civil and Defense Mobilization, Veterans Administration, and the Departments of Commerce and the Interior are not included in the data. Funds for research centers from the Atomic Energy Commission and the National Aeronautics and Space Administration are also not included. Funds for research and development in educational institutions proper and research centers associated with them included in this report account for about half of total Federal funds for this purpose reported elsewhere.[5] The data on facilities are incomplete, as research facilities grants of the National Institutes of Health are not included.

The outservice training programs of Federal agencies are only partially reported. It is believed that as the survey and uses of the data become established and the criteria for reporting is more clearly outlined, there will be more comprehensive and consistent reporting.

The breakdown of program data on the basis of fields of study, academic levels, and kinds of recipients is difficult in many programs. Records are usually not kept for reporting on this basis. Particularly in the sciences there is much overlapping of fields within a single program. Agencies encounter similar difficulties in reporting academic level. It is expected that a more complete breakdown of programs in these terms will be available in succeeding surveys as the agencies establish reporting systems that will provide this kind of data.

In reporting financial data, agencies used various terms because some found it not practical to report expenditures by activity. For some agencies the financial data include obligations. It is believed, however, that the financial data and the data on recipients provide a good indication of the level of Federal activity and its impact on educational finance and manpower development for the period covered by the report.

The number of recipients was not uniformly reported. In some cases direct recipients, such as a university or a State, were identified, but the number of individuals supported to some degree was not reported. Future surveys will yield more complete and uniform information, since data on both direct and indirect recipients will be requested.

---

[4] Limitations on data resulting from these problems are discussed in appendix A, p. 48.

[5] In *Federal Funds for Science, IX: The Federal Research and Development Budget, Fiscal Years 1959, 1960, and 1961.* National Science Foundation Washington: U.S. Government Printing Office, 1960.

## Summary of Data

The range of the Federal Government's concern and the level of its participation in educational services are illustrated by approximately 600 educational activities in the 156 programs analyzed in the present publication. Over 50 major administrative units in 22 Federal departments and agencies reported expenditures of $2.4 billion in fiscal 1959 and estimated expenditures of $2.7 billion in fiscal year 1960 in programs which provided funds for educational activities of the States and of educational institutions, or which provided educational services or funds for financing the education of individuals. These totals include loan programs and expenditures for educational institutions operated directly by the Federal Government.

**Table 1.—Federal Funds for Education, by Agency: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Agency[1] | 1959 | 1960[2] |
|---|---|---|
| Department of Health, Education, and Welfare | $724,692 | $847,452 |
| Department of Agriculture | 383,386 | 420,315 |
| Department of Commerce | 3,492 | 4,383 |
| Department of Defense | 300,877 | 346,986 |
| Department of the Interior | 101,549 | 105,894 |
| Department of Justice | 1,416 | 1,604 |
| Department of Labor | 10,941 | 12,262 |
| Department of State | 57,811 | 73,760 |
| Department of the Treasury | 5,213 | 5,304 |
| Atomic Energy Commission | 51,047 | 62,798 |
| Canal Zone | 5,019 | 7,855 |
| District of Columbia | 7,742 | 7,734 |
| Federal Aviation Agency | 1,008 | 1,069 |
| Federal Deposit Insurance Corporation | 14 | 16 |
| Housing and Home Finance Agency[3] | ------ | 250,000 |
| Library of Congress | 1,368 | 1,619 |
| National Aeronautics and Space Administration | 5,022 | 8,540 |
| National Science Foundation | 121,689 | 133,836 |
| Office of Civil and Defense Mobilization | 1,741 | 891 |
| Small Business Administration | ([4]) | ([4]) |
| Tennessee Valley Authority | 593 | 606 |
| Veterans Administration | 596,335 | 400,771 |

[1] Includes loans.
[2] Estimated by respondents.
[3] College housing loans were reported on the basis of funds authorized. Actual oans approved were $155 million in 1959 and $172 million in 1960.
[4] Data not available.

NOTE: Because of rounding, detail may not add to totals.

Table A-1 lists amounts for each activity by agency and program.[6]

Total "Federal funds for education" as defined earlier (see p. 1) and as reported to the Office of Education by the Federal agencies concerned are summarized by level of education affected and by program areas in table 2. Grants and payments include amounts paid to State and local governments and to individuals.

## Presentation of Data

Federal educational activities are analyzed by field of study in section 2, which presents data on funds for education by agency and program, academic level, and type of program. The nature of the programs in each field of study is described. Data on the kind and number of recipients reported for each field and on the number of recipients by type of program are also presented. Section 3 analyzes data on activities by academic level. Federal activities in support of education and training in the sciences are discussed in section 4. Technical notes, survey forms, and detailed tabulations are included in the appendix.

Data presented in sections 2 and 3 include the total amounts reported as "Federal funds for education". Limitations on the data included are described in this section (see "Problems of Reporting"), in footnotes to the tables, and in the technical notes, p. 48.

The data presented in section 4 exclude funds for research and research facilities, which are included in sections 2 and 3, in order to look only at education and training in the sciences. Federal funds for research and research facilities, it is recognized, have a great impact on education and training. Data are not available, however, which identify research funds that support the education and training of individuals.

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[6] Tables A-1 through A-22 are in appendix C.

## Table 2.—Federal Funds for Education, by Program Areas and by Level: Fiscal Years 1959 and 1960

| Program areas by level | Amounts in thousands | |
|---|---|---|
| | 1959 | 1960 |
| **Elementary-Secondary Education**[1] | **$762,718** | **$844,723** |
| Payments for School Lunch Program | 275,945 | 305,512 |
| Funds and value of commodities | 275,945 | 305,512 |
| Grants and other payments | 401,107 | 445,859 |
| School Assistance in Federally Affected Areas | 215,066 | 233,500 |
| Revenue from public lands[2] | 74,156 | 83,492 |
| National Defense Education Act (titles III, V, and X) | 58,268 | 72,929 |
| Vocational education | 28,982 | 30,205 |
| School assistance in special areas[3] | 18,499 | 20,804 |
| Science education—National Science Foundation | 4,632 | 4,463 |
| Other | 1,504 | 466 |
| Directly administered programs | 78,946 | 86,152 |
| Indian education | 44,994 | 47,133 |
| Education of dependents of military personnel overseas | 30,171 | 34,187 |
| Testing, counseling, placement services—Department of Labor | 3,765 | 4,815 |
| Other | 16 | 17 |
| Loans | 6,720 | 7,200 |
| National Defense Education Act (title III—loans to schools) | 6,720 | 7,200 |
| **Higher Education**[1] | **583,072** | **770,403** |
| Grants and payments | 532,728 | 459,317 |
| Veterans education | 363,267 | 248,492 |
| Training grants and traineeships | 104,366 | 133,421 |
| Fellowships | 36,901 | 47,070 |
| Federal personnel (civilian and military) | 9,441 | 11,414 |
| Special educational programs | 5,730 | 7,059 |
| International education[4] | 6,169 | 6,809 |
| Land-grant colleges (instruction) | 5,052 | 5,052 |
| Training State personnel | 1,802 | (5) |
| Directly administered programs | 50,344 | 51,467 |
| Military Academies | 42,571 | 42,536 |
| Merchant Marine schools | 3,266 | 4,016 |
| Special schools and courses—Atomic Energy Commission | 3,627 | 3,630 |
| Public health training | 529 | 724 |
| Other | 351 | 561 |
| Loans | ---------- | 259,619 |
| College housing loans[6] | ---------- | 250,000 |
| Student loans (NDEA-title II) | (7) | 9,619 |

## Table 2.—Federal Funds for Education, by Program Areas and by Level: Fiscal Years 1959 and 1960—Continued

| Program areas by level | Amounts in thousands | |
|---|---|---|
| | 1959 | 1960 |
| **Adult Education** | **$309,944** | **$234,748** |
| Grants and payments | 298,945 | 222,405 |
| Veterans education | 233,063 | 152,279 |
| Cooperative agricultural extension service | 53,715 | 53,715 |
| Vocational education | 10,847 | 14,356 |
| Training State personnel | 1,272 | 1,434 |
| Other | 43 | 621 |
| Directly administered programs | 10,999 | 12,343 |
| Promotion of apprenticeship and training | 4,009 | 4,047 |
| Indian education | 2,610 | 3,765 |
| Education in penal institutions | 1,182 | 1,373 |
| Safety training for mine workmen | 1,200 | 1,250 |
| Technical training in aviation for foreign nationals | 994 | 1,034 |
| Other | 1,004 | 874 |
| **Research and Research Facilities**[8] | **359,799** | **431,437** |
| Grants and payments | 359,799 | 431,437 |
| Research grants and contracts | 344,218 | 419,793 |
| Research facilities | 15,581 | 11,644 |
| **Not Elsewhere Classified** | **365,424** | **412,385** |
| Grants and payments | 27,332 | 32,236 |
| Federal personnel (civilian and military) | 16,206 | 17,544 |
| Library services | 5,218 | 7,500 |
| Educational Exchange Program[4] | 5,421 | 5,983 |
| Other | 487 | 1,209 |
| Directly administered programs | 45,726 | 60,649 |
| International educational activities[4] | 34,388 | 47,812 |
| Office of Education administration | 8,229 | 10,327 |
| Other | 3,109 | 2,510 |
| Original cost of surplus property transferred[9] | 292,366 | 319,500 |
| Surplus real and personal property | 292,366 | 319,500 |

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[1] Includes loans.

[2] Payments for roads and schools as determined by State legislatures. Estimated amount for schools is 50 percent.

[3] Includes payments to the District of Columbia, Territories, and other areas.

[4] Includes programs in international education not elsewhere classified.

[5] Data not available at time of reporting.

[6] Reported on basis of funds authorized. Actual loans approved were $155 million for 1959 and $172 million for 1960.

[7] Program in operation. Actual expenditures reported in 1960.

[8] Data incomplete. Total research in educational institutions proper and in research centers operated by them are reported in the National Science Foundation's Federal Funds for Science IX.

[9] Estimated actual value at time of transfer may in some instances be as little as 5 percent of orginal cost.

NOTE: Grants and payments to States, institutions, or individuals are included.

## Section 2

# Fields of Study

FEDERAL sources of funds for education are analyzed by fields of study in this section. The fields specified on the questionnaire are agricultural sciences, biological sciences, clinical sciences, education, engineering, physical sciences, social sciences, and other fields or combination of fields. The questionnaire also provided two other categories: "General education" for activities supporting general academic programs in educational institutions, and "Not applicable" for activities supporting educational services and administration for which fields of study were not applicable. A list of the areas in each field of study appears in the questionnaire, appendix B.

The classification of activities by separate and specific fields of study is difficult in some cases, for several reasons. Agencies do not ordinarily compile data for reporting in the detail requested for this report. The many programs that cut across several fields of study cannot be broken down into specific fields. Other programs that fall within the broad criteria established for this study are not related to any particular field or combination of fields. Although the questionnaire instructions provided definitions and examples and although there were many individual conferences with persons assembling the data in the agencies, arbitrary decisions were still required. The data presented, however, do provide a picture of the general level of funds for education and the distribution of funds among fields of study. Activities not classified by specific field of study are discussed at the end of this section. Many of these activities are in support of education and training in the sciences and will be discussed further in section 4.

The amounts of Federal funds for education in fiscal years 1959 and 1960 are listed by specific field of study in table 3. The amounts reported for "Other fields" are for educational activities in specific fields of study not identified separately in the categories used in the survey or for activities involving a combination of fields. Responding agencies reported increases from fiscal year 1959 to 1960 in all fields except the agricultural sciences and engineering, where the decreases in the amounts reported for veterans' education and training programs were not offset by increases in other programs or in new programs.

The amounts reported for activities not included in the specific fields listed in table 3 are discussed in detail in this section following the discussions of specific fields of study. The large amounts not classified by specific fields of study are for educational activities in such programs as college housing loans, school assistance in federally affected areas, surplus property utilization, operation of the military academies, and school support in special areas such as the District of Columbia and U.S. territories. A complete list of these programs appears in table 44, p. 29, and table 49, p. 32.

**Table 3.—Federal Funds for Education, by Field of Study: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Field of study | 1959 | 1960[1] |
|---|---|---|
| SPECIFIC FIELDS[2] | $1,048,980 | $1,083,168 |
| Agricultural sciences | 134,595 | 120,505 |
| Biological sciences | 74,924 | 95,361 |
| Clinical sciences | 59,344 | 60,977 |
| Education | 79,470 | 88,836 |
| Engineering | 78,105 | 62,429 |
| Physical sciences | 110,823 | 126,139 |
| Social sciences | 26,784 | 28,396 |
| Other fields[3] | 484,934 | 500,524 |
| GENERAL EDUCATION[4] | 1,014,461 | 1,254,587 |
| EDUCATIONAL SERVICES AND ADMINISTRATION[5] | 317,516 | 355,941 |

[1] Estimated by respondents.

[2] Total as reported by respondents does not include all research grant and contract funds. See table A-2.

[3] Includes amounts reported in combined fields (such as biological and physical sciences) or in fields not listed (such as management sciences). About half the amounts reported were for research. See table 39 for complete list of programs.

[4] Includes school assistance in federally affected areas (P.L. 815 and 874) and other support of general elementary-secondary education, original cost of surplus property transferred to educational institutions, U.S. military and Coast Guard academies, and education of dependents of military personnel overseas. Also includes college housing loans reported as funds authorized for $0 in 1959 and $250 million in 1960. Actual loans approved were $155 million and $172 million for the two years. For complete list of programs, see table 44.

[5] Reported as "field of study not applicable" by respondents.

NOTE: Because of rounding, detail may not add to totals.

## Agricultural Sciences

Educational activities in the agricultural sciences include such areas as animal husbandry, food technology, forestry, wildlife, crops, and fisheries. A complete list of the areas included in this field for the present study may be seen in the survey instructions, appendix B.

Federal funds for education in the agricultural sciences accounted for 12.8 percent of the amounts reported by specific fields of study for fiscal year 1959 and 11.1 percent for fiscal 1960. Amounts in this field are listed by agency and program in table 4. Two programs of the Department of Agriculture accounted for 62 and 70 percent of total Federal funds in the agricultural sciences in fiscal years 1959 and 1960, respectively; support of State agricultural experiment stations and of agricultural extension services. Support of vocational education and veterans' training accounted for most of the remaining amount in this field.

The total amount of Federal funds for education in the agricultural sciences decreased from 1959 to 1960. Although there were increases in expenditures for some programs, they did not offset the 43-percent decrease in expenditures for veterans' education and training.

### Academic Level

Over half the funds for educational activities in the agricultural sciences are classified as adult education in table 5. Funds for adult education in this field are for the vocational education, cooperative agricultural extension, and veterans' on-the-farm training programs. These programs provided 61 percent of total Federal funds for education in the agricultural sciences in fiscal 1959 and almost 58 percent in 1960.

The comparatively small amounts at the postdoctoral and graduate levels are primarily for fellowships and teaching grants. Most of the amount at the undergraduate level is for support of instruction at land-grant colleges and veterans' education. The veterans' education programs listed at the undergraduate level include funds for both undergraduate and graduate students. Since most of the amount reported supports undergraduate students, the programs are classified at this level. Programs for vocational education and summer training for science students are included at the elementary-secondary level. Grants for the State agricultural experiment stations account for most of the funds undistributed by specific level. Federal funds for education in the agricultural sciences are reported by academic level, agency, and program in table A-9 (p. 68).

**Table 4.—Federal Funds for Education in the Agricultural Sciences, by Agency and Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$134,595** | **$120,505** |
| **Department of Health, Education, and Welfare** | **13,799** | **14,681** |
| Instruction in Land-Grant Colleges and Universities | 792 | 795 |
| Vocational Education | 12,998 | 13,705 |
| Research Fellowships, NIH | 9 | [3]13 |
| NDEA Fellowships: Institutional Grants | (4) | 85 |
| NDEA Fellowships | (4) | 84 |
| **Department of Agriculture** | **84,561** | **84,561** |
| State Agricultural Experiment Stations | 30,846 | 30,846 |
| Cooperative Agricultural Extension Program | 53,715 | 53,715 |
| **Department of Defense** | **4** | **2** |
| Professional Training for Army Medical Service Officers | 4 | 2 |
| **Department of State[5]** | **640** | **706** |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 27 | 30 |
| Study Grants, Educational Exchange Program | 402 | 443 |
| Grants for Observation and Consultation, Educational Exchange Program | 59 | 65 |
| Research Grants, Educational Exchange Program | $122 | $134 |
| University Teaching Grants, Educational Exchange Program | 30 | 34 |
| **National Science Foundation** | **196** | **177** |
| Graduate Fellowships | 75 | 79 |
| Postdoctoral Fellowships | 39 | 16 |
| Research Participation Grants | 9 | 25 |
| Science Faculty Fellowships | 46 | 32 |
| Secondary School Teacher Fellowships | 2 | 0 |
| Summer Science Training for Secondary School Students | 25 | 25 |
| **Tennessee Valley Authority** | **560** | **576** |
| Cooperative Research, Test, and Demonstration Grants | 560 | 576 |
| **Veterans' Administration[5]** | **34,835** | **19,803** |
| Readjustment Training Program | 32,743 | 18,267 |
| Vocational Rehabilitation Program | 2,010 | 1,399 |
| War Orphans Educational Assistance | 81 | 137 |

[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 5.

[3] Includes awards for first 10 months of fiscal year 1960.

Program in operation but actual expenditures began in 1960.

[5] Office of Education estimate based on data provided by agency concerned.

NOTE: Because of rounding, detail may not add to totals.

**Table 5.—Federal Funds for Education in the Agricultural Sciences, by Academic Level: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | **$134, 595** | **$120, 505** |
| Postdoctoral | 216 | 189 |
| Graduate | 513 | 734 |
| Undergraduate | 7, 470 | 4, 969 |
| Adult education | 82, 279 | 69, 772 |
| Elementary-secondary | 12, 625 | 13, 325 |
| Undistributed by specific level | | |
| Research | 31, 406 | 31, 422 |
| Other | 87 | 95 |

NOTE: Because of rounding, detail may not add to totals.

## Types of Programs

Federal funds for education in the agricultural sciences are reported by type of program in table 6. The classification of programs in this table is designed to show amounts by types of programs in which there is special interest among Government agencies, educational institutions, and individuals concerned with Federal educational activities. These special types of programs are listed first in the table, followed by descriptive titles for other kinds of programs. The programs included in each of the categories are described in the paragraphs immediately following table 6.

**Table 6.—Federal Funds for Education in the Agricultural Sciences, by Type of Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$134, 595** | **$120, 505** |
| Research | 31, 528 | 31, 556 |
| Fellowships | 573 | 667 |
| Training grants | 34 | 135 |
| Teaching grants | 30 | 34 |
| Military personnel | 4 | 2 |
| OTHER: | | |
| Cooperative Agricultural Extension Program | 53, 715 | 53, 715 |
| Educational exchange activities | 86 | 95 |
| Instruction | 792 | 795 |
| Veterans' education | 34, 835 | 19, 803 |
| Vocational education | 12, 998 | 13, 705 |

NOTE: Because of rounding, detail may not add to totals.

*Research.*—Grants for the support of State agricultural experiment stations account for 97 percent of the funds in this category. Educational Exchange research grants and research and demonstration grants of the Tennessee Valley Authority account for the remainder.

*Fellowships.*—Fellowship programs consist of Educational Exchange Program study grants, the fellowship program of the National Defense Education Act (NDEA), and fellowships supported by the National Institutes of Health (NIH) and the National Science Foundation (NSF).

*Training grants.*—Training grants consist of NSF grants for summer science training for secondary school students, NSF grants for research participation programs for undergraduate students and teachers, and grants to institutions to support graduate training under the NDEA fellowship program, made by the Office of Education.

*Teaching grants.*—Grants to individuals for university teaching are made under the Educational Exchange Program.

*Military personnel.*—The U.S. Army professional training program for medical service officers is reported in this category.

*Other.*—Other types of programs in the agricultural sciences consist of grants to States for agricultural extension services, instruction in land-grant colleges and vocational education, veterans' education, and grants to individuals for advisory and consultative services under the Educational Exchange Program.

## Recipients

The kind and number of individual recipients in federally supported educational activities in the agricultural sciences are indicated in table 7. Graduate students include recipients of fellowship and research-participation grants. Undergraduate students include recipients of research-participation grants and veterans enrolled in the agricultural sciences. Elementary and secondary students are pupils enrolled in vocational education classes. Professional trainees include NIH research fellows and military personnel in specialized training in educational institutions; nonacademic trainees include persons in vocational education classes at the adult education level and veterans in on-the-job training programs in this field. Other individuals are recipients of grants for advisory services, technical training, and observation under the Educational Exchange Program.

**Table 7.—Kind and Number of Individuals Participating in Educational Activities in the Agricultural Sciences Supported by Federal Funds: Fiscal Years 1959 and 1960**

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| **Total** | **836, 537** | **843, 311** |
| Graduate students | 129 | 167 |
| Undergraduate students | 7, 210 | 4, 773 |
| Elementary-secondary students | 466, 450 | 470, 000 |
| Trainees, professional | 6 | 5 |
| Trainees, nonacademic | 362, 688 | 368, 312 |
| Teachers, Educational Exchange Program | 7 | 7 |
| Other individuals | 47 | 47 |

The number of individuals receiving Federal funds in fellowship, traineeship, training grant, and teaching grant programs is of special interest to those concerned with evaluating the impact of Federal educational activities on manpower development. Table 8 shows the number of individual recipients by agency in these types of programs. The number of individual recipients in this table does not include all of the individual receipents in all programs reported in table 7. Due to the different bases of classification for tables 7 and 8, individual recipients in the latter may be included in one or more of the categories in the former.

The number of individual recipients reported in training grant programs includes only a part of the total number of persons receiving support under such programs. Training grants are made directly to educational institutions and the Federal agencies cannot report the number of individuals who are trained under such grants in all cases. In view of the special concern of this study with individual recipients in federally supported programs, however, the tabulations include the number of recipients in those training grant programs in which they can be identified.

**Table 8.—Number of Individual Recipients Participating in Educational Activities in the Agricultural Sciences Supported by Federal Funds, by Selected Type of Program and Agency: Fiscal Years 1959 and 1960**

| Type of program and agency | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| **Fellowships** | **131** | **166** |
| Department of Health, Education, and Welfare | 2 | 39 |
| Department of State | 92 | 92 |
| National Science Foundation | 37 | 35 |
| **Training grants** [1] | **10** | **36** |
| National Science Foundation | 10 | 36 |
| **Teaching grants** | **7** | **7** |
| Department of State | 7 | 7 |

[1] Data incomplete. See text.

## Biological Sciences

The biological sciences include such areas as anatomy, biophysics, nutrition, physiology, and physiological psychology. A complete list of the areas included in this field for the present study may be seen in the survey instructions, appendix B.

Federal funds for education in the biological sciences account for 7.1 percent of the amounts reported by specific fields of study by the agencies concerned for fiscal year 1959 and 8.8 percent for 1960. Amounts in this field are listed by agency and program in table 9. Seven Federal departments and agencies reported programs in this field, with the Department of Health, Education, and Welfare and the National Science Foundation reporting amounts constituting about 73 percent of the total. Basic research grants, research facilities grants, and fellowship programs of NSF, and research fellowship and training grant programs of the National Institutes of Health account for a large part of this percentage.

### Academic Level

Table 10 below shows, by academic level, the amount of Federal funds for educational activities in the biological sciences. Training grants, traineeships, and fellowships of the Atomic Energy Commission (AEC) and the NIH and NSF fellowship and special institutes grants account for most of the amounts at the postdoctoral level. Fellowships and training grants of the Department of Health, Education, and Welfare, AEC, and NSF, and research contracts of AEC[1] account for most of the amounts at the graduate level. Veterans' education; support of instruction at land-grant colleges and at Howard University; NSF research participation grants; and AEC's conduct of special courses, assistance for school equipment, and teacher-training programs account for most of the total at the undergraduate level.

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[1] Research funds not included in specific level totals appear under "Undistributed by specific level".

### Table 9.—Federal Funds for Education in the Biological Sciences, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$74,924** | **$95,361** |
| **Department of Health, Education, and Welfare** | **24,121** | **35,388** |
| Instruction in Land-Grant Colleges and Universities | 1,342 | 1,350 |
| Training State and Local Officials in Food and Drug Inspection Techniques | ---------- | 3 |
| Howard University: Curriculum | 601 | 611 |
| Howard University: Staff Expenses | 18 | 20 |
| Training for State Public Health Personnel at the Communicable Disease Center | 769 | 643 |
| Experimental Training Grants to Medical Schools, NIH | 500 | 500 |
| Research Training Grants, NIH | 5,705 | 11,350 |
| Training Grants and Traineeships, Cancer Institute | 2,668 | 3,291 |
| Training Grants, Heart Institute | 1,664 | 1,819 |
| Training Grants, Institute of Allergy and Infectious Diseases | 942 | 1,941 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Diseases | 121 | 831 |
| Training Grants, Institute of Dental Research | 238 | 557 |
| Training Grants and Fellowships, Institute of Mental Health | 870 | 1,167 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 1,523 | [3] 2,072 |
| Research Fellowships, NIH | 7,159 | [3] 8,665 |
| NDEA Fellowships: Institutional Grants | (4) | 287 |
| NDEA Fellowships | (4) | 283 |
| **Department of Defense** | **59** | **57** |
| Professional Training for Army Medical Service Officers | 32 | 27 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 21 | 21 |
| Professional Training for Air Force Medical Officers | 5 | 9 |
| **Department of State[5]** | **641** | **707** |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 10 | 11 |
| Study Grants, Educational Exchange Program | 251 | 277 |
| Research Grants, Educational Exchange Program | 297 | 327 |
| Teaching and Teacher Training Grants, Educational Exchange Program | $10 | $11 |
| University Teaching Grants, Educational Exchange Program | 74 | 82 |
| **Atomic Energy Commission** | **14,800** | **19,843** |
| School Equipment and Teacher Training | 1,367 | 1,919 |
| Contract Research | 12,738 | 17,082 |
| Fellowships in Biology and Medicine | 499 | 630 |
| Special Schools and Courses | 196 | 212 |
| **National Aeronautics and Space Administration** | **167** | **820** |
| Research Grants and Contracts | 167 | 820 |
| Space Flight Center Training Program | 0 | (6) |
| **National Science Foundation** | **30,407** | **35,422** |
| Basic Research Grants | 20,462 | 24,500 |
| Course Content Improvement Grants | 785 | 1,390 |
| Graduate Fellowships | 1,532 | 1,600 |
| Inservice Institutes for Teachers | 112 | 114 |
| Postdoctoral Fellowships | 751 | 689 |
| Research Facilities Grants | 3,270 | 2,844 |
| Research Participation Grants | 502 | 958 |
| Science Faculty Fellowships | 593 | 460 |
| Secondary School Teacher Fellowships | 350 | 450 |
| Special Field Institutes Grants | 39 | 32 |
| Summer Conferences for Teachers | 55 | 44 |
| Summer Institutes for Teachers | 1,592 | 1,810 |
| Summer Science Training for Secondary School Students | 309 | 406 |
| Supplementary Training for Science Teachers | 55 | 125 |
| **Veterans' Administration** | **4,730** | **3,123** |
| Readjustment Training Program | 4,453 | 2,901 |
| Vocational Rehabilitation Program | 206 | 117 |
| War Orphans Educational Assistance | 71 | 105 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 5.
[3] Includes awards for first 10 months of fiscal year 1960.
[4] Program in operation but actual expenditures began in 1960.
[5] Office of Education estimate based on data provided by agency concerned.
[6] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

Training at the Communicable Disease Center of the U.S. Public Health Service (PHS) is reported at the adult education level. The amount for the elementary-secondary level consists of NSF summer science training grants for secondary school students. Most of the amount undistributed by specific level is for research grants and contracts of the National Aeronautics and Space Administration (NASA) and NSF.

### Table 10.—Federal Funds for Education in the Biological Sciences, by Academic Level: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | **$74,924** | **$95,361** |
| Postdoctoral | 14,625 | 20,130 |
| Graduate[1] | 26,782 | 37,966 |
| Undergraduate | 7,718 | 6,621 |
| Adult education | 769 | 643 |
| Elementary-secondary | 309 | 406 |
| Undistributed by specific level | | |
| Research | 21,414 | 26,710 |
| Facilities | 3,270 | 2,844 |
| Other | 39 | 42 |

[1] Data include AEC contract research classified by respondent at this level in the amount of $12.7 million for 1959 and $17.1 for 1960.

NOTE: Because of rounding, detail may not add to totals.

A summary of Federal funds for education in the biological sciences is presented by academic level, agency, and program in table A–10 (p. 69).

## Types of Programs

Federal funds for research in the biological sciences account for about 46 percent of total Federal funds in this field for each of the two fiscal years 1959 and 1960. Research, fellowship, and training grant programs together account for 82 percent and 88 percent of the total reported in this field in fiscal years 1959 and 1960, respectively.

*Research.*—Research grants and contracts of AEC, NASA, and NSF account for over 96 percent of funds for research in the biological sciences. Course-content improvement grants of NSF and Educational Exchange Program research grants account for the remainder.

*Fellowships.*—Research fellowship programs of NIH represent 63 percent of total Federal fellowship funds in the biological sciences in fiscal year 1959 and 66 percent in 1960. NSF funds account

**Table 11.—Federal Funds for Education in the Biological Sciences, by Type of Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$74,924** | **$95,361** |
| Research | 34,448 | 44,120 |
| Fellowships | 11,204 | 13,117 |
| Traineeships | 964 | 1,180 |
| Training grants | 16,347 | 26,980 |
| Facilities | 4,297 | 3,994 |
| Teaching grants | 84 | 92 |
| Military personnel | 59 | 57 |
| Federal employees | 0 | ([1]) |
| OTHER: | | |
| Educational exchange activies | 10 | 11 |
| Instruction | 1,961 | 1,981 |
| Teacher training | 51 | 60 |
| Training State and local officials | 769 | 646 |
| Veterans' education | 4,730 | 3,123 |

[1] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

for 28 percent of the total in fiscal 1959 and 24 percent of the total in 1960. Fellowship programs of AEC, Educational Exchange Program study grants, and fellowships under the National Defense Education Act account for the remainder.

*Traineeships.*—Direct traineeship programs of NIH account for about 86 percent of total Federal funds for traineeships in this field for fiscal years 1959 and 1960. The remainder represents traineeship programs of AEC.

*Training grants.*—Training grants of NIH account for about 82 percent of total training grants in the biological sciences for fiscal years 1959 and 1960. The NIH grants and experimental training grants in biology, including biophysics and physiological psychology. NSF grants account for 16 percent and 12 percent of total training grants for fiscal years 1959 and 1960, respectively. These NSF grants support supplementary training for science teachers, science training for secondary school students, teacher training institutes, and research participation programs for undergraduate students and science teachers. AEC grants for faculty training in radiobiology and grants to institutions under the NDEA fellowship program account for the remainder of training grant funds.

*Facilities.*—The amount for facilities includes NSF research facilities grants and AEC assistance to schools for life sciences training equipment.

*Teaching grants.*—The amount for teaching grants consists of the Educational Exchange Program grants to university and elementary-secondary school teachers for actual teaching.

*Military personnel.*—The amount reported is for expenses of military medical personnel in training in educational institutions.

*Federal employees.*—The amount reported is for outservice training of NASA employees.

*Other.*—Other funds in the biological sciences are for veterans' education, instruction in land-grant colleges and at Howard University, training of State and local public health personnel in Federal facilities, and training of science teachers through special AEC courses.

## Recipients

The kind and number of individual recipients in federally supported educational activities in the biological sciences are indicated in table 12. Graduate students include recipients of fellowships provided by the Department of Health, Education, and Welfare, AEC, and NSF; teachers in training under NSF grants; and Howard University graduate students. Veterans enrolled in this field, Howard University students, and participants in NSF research participation grant programs account for the number of undergraduate students reported. Professional trainees include research fellows and direct and indirect trainees of NIH, participants in special radiobiological training courses of AEC, military medical personnel in training in educational institutions, and State personnel trained in food and drug inspection techniques under sponsorship of the Food and Drug Administration. Nonacademic trainees are State health personnel in training at the U.S. Public Health Service Communicable Disease Center. Teachers, research personnel, and other individuals reported are recipients of grants under the Educational Exchange Program.

**Table 12.—Kind and Number of Individuals Participating in Educational Activities in the Biological Sciences Supported by Federal Funds: Fiscal Years 1959 and 1960**

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| **Total** | **22,475** | **22,229** |
| Graduate students | 6,372 | 6,920 |
| Undergraduate students | 8,442 | 7,459 |
| Trainees, professional | 3,067 | 4,148 |
| Trainees, nonacademic | 4,505 | 3,613 |
| Teachers Educational Exchange Program | 19 | 19 |
| Other individuals | 70 | 70 |

The number of persons receiving Federal support in the form of fellowships and direct traineeships and the number of participants in training grant and teaching grant programs are indicated in table 13, by agency. The individual recipients reported in this table are included in the total number of individuals reported in table 12, where they may be included in one or more of the categories listed. The number of participants in training grant programs listed in table 13, however, does not represent the total number of such participants. Some agencies do not maintain records on the number of persons participating in such programs.

**Table 13.—Number of Individual Recipients Participating in Educational Activities in the Biological Sciences Supported by Federal Funds, by Selected Type of Program and Agency: Fiscal Years 195 and 1960**

| Type of program and agency | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| **Fellowships** | **3,396** | **3,710** |
| Department of Health, Education, and Welfare | 2,311 | 2,606 |
| Department of State | 58 | 58 |
| Atomic Energy Commission | 99 | 114 |
| National Science Foundation | 928 | 932 |
| **Traineeships** | **411** | **431** |
| Department of Health, Education, and Welfare | 171 | 181 |
| Atomic Energy Commission | 240 | 250 |
| **Training grants**[1] | **4,536** | **6,115** |
| Department of Health, Education, and Welfare | 1,941 | 2,769 |
| National Science Foundation | 2,595 | 3,346 |
| **Teaching grants** | **19** | **19** |
| Department of State | 19 | 19 |

[1] Data incomplete. See text.

## Clinical Sciences

The clinical sciences include activities in the clinical-medical fields generally and in such specific areas as anesthetics, dermatology, neurology, nursing, psychiatry, surgery, and clinical psychology. A complete list of the areas included in the clinical sciences for this study appears in the survey instructions (app. B).

Federal funds for educational activities in the clinical sciences accounts for 5.7 percent of the amounts reported by specific fields of study by the agencies concerned for fiscal year 1959 and 5.6 percent for 1960 (see table 14). Programs of the Department of Health, Education, and Welfare provided 71 percent of the total reported in the clinical sciences for fiscal year 1959 and 80 percent for 1960. Most of this amount supports the fellowship, traineeship, and training grant programs of the National Institutes of Health.

The Veterans Administration accounts for about 24 percent of the total in the clinical

**Table 14.—Federal Funds for Education in the Clinical Sciences, by Agency and Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total**[2] | **$59,344** | **$60,977** |
| **Department of Health, Education, and Welfare** | **42,678** | **49,004** |
| Howard University: Curriculum | 574 | 630 |
| Howard University: Staff Expenses | 30 | 30 |
| Education in Public Health Service Hospitals | 210 | 248 |
| Training of Indian Health Personnel | 283 | 301 |
| Training Grants and Traineeships, Cancer Institute | 3,241 | 3,313 |
| Training Grants, Heart Institute | 5,104 | 5,452 |
| Training Grants, Institute of Allergy and Infectious Diseases | 817 | 1,594 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Diseases | 2,135 | 3,554 |
| Training Grants, Institute of Dental Research | 412 | 516 |
| Training Grants and Fellowships, Institute of Mental Health | 14,542 | 16,635 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 4,116 | [3]5,212 |
| Research Fellowships, NIH | 1,943 | [3]1,738 |
| Traineeships for Public Health Personnel and Nurses | 5,935 | 5,733 |
| Nursing Education at Saint Elizabeths Hospital | ([4]) | ([4]) |
| Resident and Intern Training in the Clinical Sciences at Saint Elizabeths Hospital | [1]121 | 181 |
| Training State Personnel in Maternal and Child Health Programs | 1,532 | 1,586 |
| Rehabilitation Training Grants, OVR | 1,684 | 2,280 |
| **Department of Defense** | **645** | **740** |
| Professional Training for Army Medical Service Officers | 21 | 33 |
| Medical Training for Navy Personnel in Civilian Medical Schools | $170 | $175 |
| Professional Training for Air Force Medical Officers | 49 | 59 |
| Federal Council on Medical Education for National Defense Program | 405 | 473 |
| **Department of State**[5] | **1,519** | **1,677** |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 111 | 123 |
| Study Grants, Educational Exchange Program | 841 | 928 |
| Grants for Observation and Consultation, Educational Exchange Program | 76 | 84 |
| Research Grants, Educational Exchange Program | 417 | 460 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 4 | 5 |
| University Teaching Grants, Educational Exchange Program | 70 | 77 |
| **National Science Foundation** | **7** | **23** |
| Special Field Institutes Grants | 7 | 0 |
| Supplementary Training for Science Teachers | 0 | 23 |
| **Veterans' Administration**[5] | **14,494** | **9,534** |
| Readjustment Training Program | 13,436 | 8,368 |
| Vocational Rehabilitation Program | 511 | 414 |
| War Orphans Educational Assistance | 547 | 752 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 5.
[3] Includes awards for first 10 months of fiscal year 1960.
[4] Data not available.
[5] Office of Education estimate based on data provided by agency concerned.

NOTE: Because of rounding, detail may not add to totals.

sciences for fiscal year 1959 and 16 percent for 1960. As in other fields of study, the amount of support for veterans' education is decreasing with the expiration of eligibility of veterans who served in World War II and the Korean conflict.

### Academic Level

Funds for educational activities at the postdoctoral level account for 33 percent of total Federal funds in the clinical sciences for fiscal year 1959 and 40 percent for 1960. Most of the amount is for NIH training grants, traineeships, and fellowships. Much of the amount at the graduate level is for the same programs. At the undergraduate level, veterans' education accounts for most of the amounts reported, with the National Institute of Mental Health providing significant support in its training grant and fellowship programs. Funds for elementary-secondary education are for the training of Indian health personnel. Funds undistributed by specific level are largely for traineeships for public health personnel and nurses and for rehabilitation training grants. A complete list of amounts by academic level is presented in table 15. Amounts by academic level, agency, and program for the clinical sciences are reported in table A–11 (p. 70).

**Table 15.—Federal Funds for Education in the Clinical Sciences, by Academic Level: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | **$59, 344** | **$60, 977** |
| Postdoctoral | 20, 138 | 24, 938 |
| Graduate | 15, 123 | 16, 433 |
| Undergraduate | 15, 722 | 10, 828 |
| Elementary-secondary | 283 | 301 |
| Undistributed by specific level | | |
| Traineeships at combined levels | 5, 935 | 5, 733 |
| Training grants at combined levels | 1, 906 | 2, 482 |
| Other | 237 | 263 |

NOTE: Because of rounding, detail may not add to totals.

### Types of Programs

Over half the amount reported for the clinical sciences was for training grants, accounting for 54 percent of the total reported in this field for fiscal 1959 and 62 percent for 1960. This reflects the large training grant programs of the National Institutes of Health.

Amounts are reported in table 16 by type of program. The contents of each category are described in the following paragraphs.

*Research.*—Funds in this category consist of Educational Exchange Program grants to individuals for research.

*Fellowships.*—Fellowship programs in this field include NIH research fellowships and career investigator grants and study grants under the Educational Exchange Program.

**Table 16.—Federal Funds for Education in the Clinical Sciences, by Type of Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$59, 344** | **$60, 977** |
| Research | 417 | 460 |
| Fellowships | 3, 023 | 2, 928 |
| Traineeships | 7, 657 | 7, 919 |
| Training grants | 32, 159 | 33, 377 |
| Teaching grants | 74 | 82 |
| Military personnel | 240 | 267 |
| OTHER: | | |
| Educational exchange activities | 187 | 207 |
| Indian health personnel | 283 | 301 |
| Instruction | 604 | 660 |
| Public Health Service hospitals | 206 | 243 |
| Veterans' education | 14, 494 | 9, 534 |

NOTE: Because of rounding, detail may not add to totals.

*Traineeships.*—U.S. Public Health Service traineeships for public health personnel and nurses account for 77 percent and 72 percent of total traineeship funds in the clinical sciences in fiscal years 1959 and 1960, respectively. PHS also provides traineeships for training medical librarians and traineeships through the National Institutes of Health. St. Elizabeths Hospital reported resident and intern training activities in the clinical sciences.

*Training grants.*—Training grants of NIH account for 89 percent of the total amount for such grants in this field in fiscal years 1959 and 1960. Vocational rehabilitation grants, grants for training State personnel in maternal and child health programs, grants of the Federal Council on Medical Education for National Defense, and NSF grants for field institutes and supplementary training for science teachers account for the remaining 11 percent.

*Teaching grants.*—Grants for teaching under the Educational Exchange Program are included in this category.

*Military personnel.*—The military services reported costs of training medical personnel in educational institutions.

*Other.*—Federal funds for other types of programs include veterans' education, funds for instruction in the clinical sciences at Howard University, training of Indian practical nurses and dental assistants, the Freedmen's Hospital School of Nursing, and grants for advisory services, technical training, observation, and consultation under the Educational Exchange Program.

### Recipients

The kind and number of individual participants in federally supported educational activities in the clinical sciences are listed in table 17. Graduate students include students at Howard University, recipients of NIH fellowships and indirect traineeships, recipients of study grants under the Educational Exchange Program, graduate nurses in training at St. Elizabeths Hospital, and students in training at Public Health Service hospitals. Undergraduate students include veterans enrolled at educational institutions in the clinical sciences and undergraduate nursing students at St. Elizabeths Hospital.

Professional trainees are recipients under training grant, traineeship, or research fellowship grant programs of the U.S. Public Health Service, including NIH, and the Office of Vocational Rehabilitation (OVR). Also included are interns at St. Elizabeths Hospital, State personnel in maternal and child health training programs supported by Federal funds, and military medical personnel in training in educational institutions. Nonacademic trainees are enrollees in programs for training Indian health personnel. Teachers are recipients of teaching grants under the Educational Exchange Program. Other individuals are participants in advisory services, technical training, observation and consultation, and research personnel under the Educational Exchange Program.

**Table 17.—Kind and Number of Individuals Participating in Educational Activities in the Clinical Sciences Supported by Federal Funds: Fiscal Years 1959 and 1960**

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| **Total** | **25,718** | **22,153** |
| Graduate students | 2,609 | 2,306 |
| Undergraduate students | 16,009 | 11,046 |
| Trainees, professional | 6,852 | 8,547 |
| Trainees, nonacademic | 94 | 100 |
| Teachers, Educational Exchange Program | 17 | 17 |
| Other individuals | 137 | 137 |

The number of persons assisted by Federal funds in the form of fellowships and direct traineeships, or who are assisted in their education through funds from training grants made to educational institutions, or who receive grants for teaching is indicated in table 18. The number of individuals reported in this table is included in the total number of individual recipients reported in table 17, where they may be included in one or more of the kinds of recipients listed. The number of individuals reported in training grant programs includes only part of the total number of individual recipients under such programs, as the Federal agencies cannot provide such data for all programs.

**Table 18.—Number of Individual Recipients Participating in Educational Activities in the Clinical Sciences Supported by Federal Funds, by Selected Type of Program and Agency: Fiscal Years 1959 and 1960**

| Type of program and agency | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| **Fellowships** | **517** | **457** |
| Department of Health, Education, and Welfare | 325 | 265 |
| Department of State | 192 | 192 |
| **Traineeships** | **2,542** | **3,839** |
| Department of Health, Education, and Welfare | 2,542 | 3,839 |
| **Training grants**[1] | **4,004** | **4,327** |
| Department of Health, Education, and Welfare | 4,004 | 4,327 |
| **Teaching grants** | **17** | **17** |
| Department of State | 17 | 17 |

[1] Data incomplete. See text.

## Education

The field of education includes general teacher training and specialized training in such areas as distributive education, industrial arts, business and commercial subjects, and trades and industry. It also includes research and development in the field of education. Instructions for classification of activities in this field may be seen in appendix B.

Federal funds in the field of education account for 7.6 percent of the amount reported by specific fields of study by the agencies concerned for fiscal year 1959 and 8.2 percent for 1960. Amounts are listed by agency and program in table 19. Programs of the International Cooperation Administration (ICA) in the Department of State and the Veterans' Administration account for over 88

## Table 19.—Federal Funds for Education in the Field of Education, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 [1] |
|---|---|---|
| **Total [2]** | **$79,470** | **$88,836** |
| **Department of Health, Education, and Welfare** | **4,683** | **10,538** |
| Cooperative Research in Education | 2,681 | 3,200 |
| Promotion of New Educational Media | (3) | 3,915 |
| Instruction in Land-Grant Colleges and Universities | 27 | 27 |
| Vocational Education | 1,570 | 1,665 |
| Fellowships in Programs for the Education of the Mentally Retarded | (4) | 1,000 |
| Howard University: Curriculum | 153 | 150 |
| Training Grants, Heart Institute | 210 | 301 |
| Research Fellowships, NIH | 42 | [5] 60 |
| Occupational Therapy Intern Training at St. Elizabeths Hospital | (6) | (6) |
| Training in Psychotherapy at St. Elizabeths Hospital | (6) | (6) |
| Volunteer Training at St. Elizabeths Hospital | (6) | (6) |
| NDEA Fellowships: Institutional Grants | (3) | 110 |
| NDEA Fellowships | (3) | 109 |
| **Department of Defense** | **14** | **10** |
| Professional Training for Army Medical Service Officers | $14 | $10 |
| **Department of State** | **35,596** | **49,241** |
| Grants for Advisory Services and Technical Training, Educational Exchange Program [7] | 400 | 441 |
| Study Grants, Educational Exchange Program [7] | 690 | 762 |
| Grants for Observation and Consultation, Educational Exchange Program [7] | 507 | 560 |
| Research Grants, Educational Exchange Program [7] | 35 | 38 |
| Teaching and Teacher Training Grants, Educational Exchange Program [7] | 2,568 | 2,834 |
| University Teaching Grants, Educational Exchange Program [7] | 175 | 193 |
| Cooperative Educational Activities in Other Countries | 31,221 | 44,412 |
| **Veterans' Administration [7]** | **39,177** | **29,048** |
| Readjustment Training Program | 36,114 | 25,947 |
| Vocational Rehabilitation Program | 2,025 | 1,622 |
| War Orphans Education Assistance | 1,038 | 1,478 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 7.
[3] Program in operation but actual expenditures began in 1960.
[4] New program in 1960.
[5] Includes awards for first 10 months of fiscal year 1960.
[6] Data not available.
[7] Office of Education estimate based on data provided by agency concerned.

NOTE: Because of rounding, detail may not add to totals.

percent of the total in this field in 1959 and more than 82 percent in 1960. Most teacher-training programs are reported in fields of study other than education because the special purposes involved concern these other fields. Programs for teacher training in all fields of study and at all academic levels would involve expenditures of from $40 to $45 million for each of the 2 fiscal years.

### Academic Level

Federal funds at the undergraduate level account for 51 percent of the total in the field of education in fiscal year 1959 and 34 percent in 1960. The decrease is accounted for in the amounts reported by the Veterans' Administration as most of the amounts at this level were for veterans' education programs. Fellowships, training grants, and teaching grants account for the amounts reported at the postdoctoral and graduate levels. Amounts undistributed by specific level include Educational Exchange Program grants for advisory services, technical training, and consultation, grants for cooperative research in education, and grants for utilization of new educational media. Funds are reported by academic level in table 20. Amounts by academic level, agency, and program are reported in table A–12 (p. 71).

### Types of Programs

Federal funds in the field of education are reported by type of program in table 21 below. Most of the total amount in this field is for veterans' education and for international cooperative educational activities. The program content of each type of program listed in the table is described in the paragraphs which follow.

## Table 20.—Federal Funds for Education in the Field of Education, by Academic Level: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | **$79,470** | **$88,836** |
| Postdoctoral | 451 | 592 |
| Graduate | 713 | 1,991 |
| Undergraduate | 40,928 | 30,890 |
| Undistributed by specific level | | |
| International educational activities | 34,696 | 48,247 |
| Research | 2,681 | 7,115 |

NOTE: Because of rounding, detail may not add to totals.

*Research.*—Funds for research constituted 3 percent of the total in the field of education for fiscal year 1959 and increased to 8 percent in

## Table 21.—Federal Funds for Education in the Field of Education, by Type of Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$79,470** | **$88,836** |
| Research | 2,716 | 7,153 |
| Fellowships | 732 | 1,931 |
| Training grants | 1,780 | 2,076 |
| Teaching grants | 2,743 | 3,027 |
| Military | 14 | 10 |
| OTHER: | | |
| Educational exchange activities | 907 | 1,001 |
| Instruction | 180 | 177 |
| International cooperative educational activities | 31,221 | 44,412 |
| Veterans' education | 39,177 | 29,047 |

NOTE: Because of rounding, detail may not add to totals.

1960. Research programs include the cooperative research and utilization of new educational media programs of the Office of Education and research grants under the Educational Exchange Program of the Department of State.

*Fellowships.*—Fellowships in the field of education account for less than 1 percent of the total funds in the field for fiscal year 1959 and just over 2 percent for 1960. Included in this breakdown are programs for the improvement of teaching the mentally retarded, fellowships under the National Defense Education Act, and National Institutes of Health fellowships in the field of education. Most of the amount for fellowships is for study grants under the Educational Exchange Program.

*Training grants.*—Grants to institutions under the NDEA fellowship program and training grants awarded by NIH account for the amount reported in this category.

*Teaching grants.*—Teaching grants under the Educational Exchange Program are included in this category.

*Military.*—The amounts reported were for specialized training of Army medical service officers in educational institutions.

*Other.*—Educational exchange activities include grants for advisory services, technical training, observation, and consultation under the Educational Exchange Program. The amounts for instruction include grants for instruction in the field of education in land-grant colleges and for support of instruction in this field at Howard University. International cooperative educational activities include programs in other countries sponsored by ICA in the Department of State. Veterans' education includes estimated expenditures for veterans enrolled in this field.

### Recipients

The kind and number of individual recipients in federally supported educational activities in the field of education are indicated in table 22. Graduate students include recipients of fellowships in programs for the education of the mentally retarded, NDEA fellowships, NIH research fellowships, and recipients of study grants under the Educational Exchange Program. Undergraduate students consist largely of veterans enrolled in this field and students in distributive occupational training. Other undergraduate students are students at Howard University, in Merchant Marine schools, and in occupational therapy intern training at St. Elizabeths Hospital. Professional trainees include trainees under NIH training grants, research fellowships in specialized training under NIH grants, and Army medical service officers in specialized training in educational institutions.

**Table 22.—Kind and Number of Individuals Participating in Educational Activities in the Field of Education Supported by Federal Funds: Fiscal Years 1959 and 1960**

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| **Total** | **72,577** | **66,567** |
| Graduate students | 162 | 381 |
| Undergraduate students | 69,590 | 62,776 |
| Professional trainees | 52 | 60 |
| Teachers, Educational Exchange Program | 629 | 629 |
| Other individuals | 2,144 | 2,721 |

Teachers are recipients of awards for teaching under the Educational Exchange Program. Other individuals are trainees in psychotherapy at St. Elizabeths Hospital; research personnel who are recipients of Educational Exchange Program research grants; recipients of grants for advisory, technical training, observation, and consultation services also under the Educational Exchange Program; and participants in ICA cooperative educational activities in other countries.

Table 23 shows the number of individual recipients in major types of programs. As in similar tables for other fields of study, recipients reported in table 23 are included in the total number of individual recipients reported in table 22, where they may be included in one or more of the kinds of recipients listed.

**Table 23.—Number of Individual Recipients Participating in Educational Activities in the Field of Education Supported by Federal Funds, by Selected Type of Program and Agency: Fiscal Years 1959 and 1960**

| Type of program and agency | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| **Fellowships** | **170** | **393** |
| Department of Health, Education, and Welfare | 11 | 234 |
| Department of State | 159 | 159 |
| **Training grants**[1] | **23,390** | **25,787** |
| Department of Health, Education, and Welfare | 23,390 | 25,787 |
| **Teaching grants** | **629** | **629** |
| Department of State | 629 | 629 |

[1] Data Incomplete. See text.

The number of individuals receiving support from Federal funds for training grants to educational institutions could not be reported by the responding agencies for all such programs. The number reported in table 23 for this type of program, therefore, does not include the total number of such recipients.

## Engineering

The engineering sciences include, for purposes of this report, aeronautical, architectural, chemical, geological, mechanical, and mining engineering. Instructions and a list of areas included in this field may be found in appendix B.

Federal funds for education in the field of engineering account for 7.4 percent of the amounts reported by specific fields of study by the agencies concerned for fiscal year 1959 and 5.8 percent for 1960. Veterans' education programs account for 73 and 60 percent of the amounts reported in this field for fiscal years 1959 and 1960, respectively. Nine other agencies reported activities in engineering, primarily for research and fellowship programs, educational facilities, training grants, and training of military personnel in educational institutions. Amounts are listed by agency and program in table 24 below.

### Academic Level

Funds for undergraduate education, primarily in the form of payments to veterans enrolled in educational institutions, account for 80 percent of total Federal funds in this field in fiscal 1959 and 70 percent in 1960. At the postdoctoral level, the National Institutes of Health and the National Science Foundation provided fellowships and training grants, and the Department of State provided research grants and grants for university teaching through its Educational Exchange Program. At the graduate level, NIH research fellowships and NDEA fellowships were

Table 24.—Federal Funds for Education in the Field of Engineering, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total**[2] | **$78,105** | **$62,429** |
| **Department of Health, Education, and Welfare** | **1,677** | **2,040** |
| Instruction in Land-Grant Colleges and Universities | 1,416 | 1,415 |
| Howard University: Curriculum | 189 | 202 |
| Howard University: Staff Expenses | 20 | 25 |
| Training Grants, Heart Institute | 36 | 99 |
| Research Fellowships, NIH | 16 | [3] 23 |
| NDEA Fellowships: Institutional Grants | (4) | 139 |
| NDEA Fellowships | (4) | 137 |
| **Department of Commerce** | **3,266** | **4,016** |
| Merchant Marine Schools | 3,266 | 4,016 |
| **Department of Defense** | **1,160** | **1,163** |
| Education at Civilian Institutions for Army Personnel | 331 | 260 |
| Education at Civilian Institutions for Navy Personnel | 377 | 375 |
| Medical Training for Navy Personnel in Civilian Medical Schools | (5) | (5) |
| U.S. Air Force Institute of Technology—Nonresident Training | 452 | 528 |
| **Department of the Interior** | **1,200** | **1,250** |
| Safety Training for Mine Workmen | 1,200 | 1,250 |
| **Department of State**[6] | **1,700** | **1,877** |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 12 | 13 |
| Study Grants, Educational Exchange Program | 1,456 | 1,607 |
| Grants for Observation and Consultation, Educational Exchange Program | 32 | 35 |
| Research Grants, Educational Exchange Program | 105 | 116 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 4 | 4 |
| University Teaching Grants, Educational Exchange Program | 92 | 101 |
| **Department of the Treasury** | **$48** | **$82** |
| U.S. Coast Guard Officer Specialized Training | 48 | 82 |
| **Atomic Energy Commission** | **228** | **240** |
| Special Schools and Courses | 228 | 240 |
| **National Aeronautics and Space Administraion** | **2,693** | **2,378** |
| Ames Research Center Training Program | 13 | 32 |
| Flight Research Center Training Program | 0 | 1 |
| Langley Research Center Training Program | 13 | 25 |
| Lewis Research Center Training Program | 8 | 20 |
| Research Grants and Contracts | 2,659 | 2,300 |
| Space Flight Center Training Program | 0 | 1 |
| **National Science Foundation** | **8,849** | **11,583** |
| Basic Research Grants | 4,312 | 6,100 |
| Course Content Improvement Grants | 50 | 291 |
| Graduate Fellowships | 1,377 | 1,580 |
| Postdoctoral Fellowships | 64 | 102 |
| Research Facilities Grants | 2,000 | 2,000 |
| Research Participation Grants | 106 | 330 |
| Science Faculty Fellowships | 640 | 682 |
| Summer Conferences for Teachers | 28 | 30 |
| Summer Institutes for Teachers | 227 | 377 |
| Summer Science Training for Secondary School Students | 42 | 44 |
| Supplementary Training for Science Teachers | 5 | 46 |
| **Veterans Administration**[6] | **57,284** | **37,801** |
| Readjustment Training | 55,597 | 36,368 |
| Vocational Rehabilitation | 1,133 | 682 |
| War Orphans Educational Assistance | 553 | 752 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnotes.
[3] Includes awards for first 10 months of fiscal year 1960.
[4] Program in operation but actual expenditures began in 1960.
[5] Less than $500.
[6] Office of Education estimate based on data provided by agency concerned.

NOTE: Because of rounding, detail may not add to totals.

reported by the Department of Health, Education, and Welfare; teacher-training grants, research participation grants, and fellowships by NSF; conduct of special courses by AEC; and expenses of training military and civilian personnel in educational institutions by the Departments of Defense and the Treasury and NASA.

The amount for adult education is for the mining safety training program of the Department of the Interior. Elementary-secondary funds are for summer science training for secondary school students under NSF grant programs. Most of the amounts undistributed by specific level are for research grants and contracts and research facilities grants of NSF and NASA Federal funds for education in the field of engineering are listed by academic level in table 25. Table A–13 lists amounts by academic level, agency, and program (p. 72).

### Table 25.—Federal Funds for Education in the Field of Engineering, by Academic Level: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | $78,105 | $62,429 |
| Postdoctoral | 404 | 469 |
| Graduate | 4,818 | 5,825 |
| Undergraduate | 62,553 | 44,072 |
| Adult education | 1,200 | 1,250 |
| Elementary-secondary | 42 | 44 |
| Undistributed by specific level: | | |
| Research | 7,021 | 8,691 |
| Facilities | 2,000 | 2,000 |
| Other | 68 | 78 |

NOTE: Because of rounding, detail may not add to totals.

## Types of Programs

Federal funds for education in the field of engineering are reported by type of program in table 26 below. Amounts for selected types of programs are presented first, followed by amounts for other kinds of programs. Program content of each of the categories reported is described below.

*Research.*—Research grants and contracts of NASA and NSF account for most of the funds for research in the field of engineering. AEC awarded grants for development of pedagogical tools and NSF awarded course content improvement grants. Research grants under the Educational Exchange Program are also included.

### Table 26.—Federal Funds for Education in the Field of Engineering, by Type of Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | $78,105 | $62,429 |
| Research | 7,180 | 8,807 |
| Fellowships | 3,553 | 4,128 |
| Training grants | 444 | 1,065 |
| Facilities | 2,000 | 2,000 |
| Teaching grants | 96 | 105 |
| Military personnel | 1,208 | 1,245 |
| Federal employees | 34 | 79 |
| OTHER: | | |
| AEC special schools | 174 | 240 |
| Educational exchange activities | 44 | 48 |
| Instruction | 1,625 | 1,642 |
| Merchant Marine schools | 3,266 | 4,016 |
| Safety training for mine workmen | 1,200 | 1,250 |
| Veterans' education | 57,284 | 37,801 |

NOTE: Because of rounding, detail may not add to totals.

*Fellowships.*—Most of the fellowship funds in engineering were available under NSF programs and study grants under the Educational Exchange Program. NIH research fellowships and NDEA fellowships in engineering were also reported.

*Training grants.*—NSF grants for teacher-training institutes and for special projects in science education account for most of the funds in this category. Special projects of NSF consist of research participation grants for undergraduate students and for teacher training, grants for supplementary training of teachers, and support of summer training for secondary school students. The National Heart Institute also reported grants in this area. Grants to institutions under the NDEA fellowship program are included in this category.

*Facilities.*—Support of facilities in this field consists of NSF research facilities grants.

*Teaching grants.*—Grants for university teaching and for teaching and teacher training for elementary and secondary school personnel under the Educational Exchange Program account for the amount reported in this category.

*Military personnel.*—The amount for military personnel is for expenses of military personnel in training in educational institutions. Included in this category are expenses of Coast Guard officers in specialized training in educational institutions.

*Federal employees.*—NASA reported expenses for outservice training of employees in educational institutions.

*Other.*—Amounts for other types of programs and the amount of Federal support are identified in table 26. The amount for instruction includes grants for instruction in engineering at land-grant colleges and at Howard University. Educational exchange activities include grants for advisory and consultation services in this field. The AEC special schools are for training reactor supervisors.

### Recipients

The kind and number of individual participants in federally supported educational activities in the field of engineering are listed in table 27. Graduate students include recipients of fellowship awards, Federal employees and military personnel in graduate training at educational institutions, and teachers at federally financed institutes. The undergraduate students are veterans enrolled in educational institutions, undergraduate engineering students at Howard University, and Federal employees and military personnel in training at educational institutions. Professional trainees include persons in training under NIH training grants to educational institutions, research fellows supported by NIH awards, military medical personnel in civilian medical schools for specialized training, and trainees in AEC special schools and courses. Nonacademic trainees are mine workmen taking safety training. Teachers and and other persons are recipients of grants under the Educational Exchange Program.

**Table 27.—Kind and Number of Individuals Participating in Educational Activities in the Field of Engineering Supported by Federal Funds: Fiscal Years 1959 and 1960**

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| **Total** | **109,961** | **90,253** |
| Graduate students | 2,494 | 3,009 |
| Undergraduate students | 64,360 | 46,103 |
| Trainees, professional | 50 | 83 |
| Trainees, nonacademic | 43,000 | 41,001 |
| Teachers, Educational Exchange Program | 22 | 22 |
| Other individuals | 35 | 35 |

Table 28 shows the number of individual recipients in selected types of programs. These recipients are included in the total number of recipients reported in table 27, where they may be listed in one or more of the categories of kinds of recipients.

The number of persons receiving support from Federal funds in training grants made to educational institutions could not be reported for all such programs by the Federal agencies concerned. The number of recipients reported under such programs therefore does not reflect the total number of persons whose training is supported in some degree by Federal funds.

**Table 28.—Number of Individual Recipients Participating in Educational Activities in the Field of Engineering Supported by Federal Funds, by Selected Type of Program and Agency: Fiscal Years 1959 and 1960**

| Type of program and agency | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| **Fellowships** | **897** | **1,045** |
| Department of Health, Education, and Welfare | 5 | 65 |
| Department of State | 334 | 334 |
| National Science Foundation | 558 | 646 |
| **Training grants**[1] | **416** | **831** |
| Department of Health, Education, and Welfare | 4 | 6 |
| National Science Foundation | 412 | 825 |
| **Teaching grants** | **22** | **22** |
| Department of State | 22 | 22 |

[1] Date incomplete. See text.

## Physical Sciences

The physical sciences include such areas as chemistry, geology, mathematics, metallurgy, physics, and astronomy. Instruction for classification and a list of science areas to be reported in this field are included in appendix B.

Federal funds for education in the physical sciences account for 10.6 percent of the amount reported by specific fields of study by the agencies concerned for fiscal year 1959 and 11.7 percent for 1960. NSF fellowship, research grant, research facilities grant, and teacher-training programs account for 48 percent and 47 percent of total Federal funds in this field in fiscal years 1959 and 1960, respectively. Fellowships, contract research, and other programs of AEC provided 28 percent and 30 percent of the total for these years. In addition to AEC and NSF, seven other Federal agencies also reported activities in physical sciences. Amounts reported in this field are listed by agency and program in table 29.

### Academic Level

The amount of Federal funds in the physical sciences are listed by academic level in table 30. The amount reported at the postdoctoral level includes NSF fellowship and teacher-training

### Table 29.—Federal Funds for Education in the Physical Sciences, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 [1] |
|---|---|---|
| **Total [2]** | **$110,823** | **$126,139** |
| **Department of Health, Education, and Welfare** | **3,898** | **7,421** |
| Instruction in Land-Grant Colleges and Universities | 446 | 440 |
| Vocational Education | 2,746 | 5,000 |
| Training State and Local Officials in Food and Drug Inspection Techniques | | 3 |
| Howard University: Curriculum | 295 | 257 |
| Research Fellowships, NIH | 411 | [3] 676 |
| NDEA Fellowships: Institutional Grants | (4) | 526 |
| NDEA Fellowships | (4) | 520 |
| **Department of Commerce** | **145** | **279** |
| Research and Training in the National Bureau of Standards | 104 | 206 |
| Training Foreign Meteorologists | 41 | 72 |
| **Department of Defense** | **141** | **334** |
| Education at Civilian Institutions for Army Personnel | 118 | 317 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 23 | 18 |
| **Department of State [5]** | **2,337** | **2,579** |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 13 | 15 |
| Study Grants, Educational Exchange Program | 1,192 | 1,316 |
| Grants for Observation and Consultation, Educational Exchange Program | 13 | 15 |
| Research Grants, Educational Exchange Program | 747 | 825 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 117 | 129 |
| University Teaching Grants, Educational Exchange Program | 253 | 279 |
| **Department of the Treasury** | **2** | **(6)** |
| U.S. Coast Guard Officer Specialized Training | 2 | (6) |
| **Atomic Energy Commission** | **$31,061** | **$38,368** |
| Assistance to Schools in Reactor Technology | 438 | 1,225 |
| Fellowships in Nuclear Science and Engineering | 426 | 550 |
| Special Schools and Courses | 3,307 | 3,190 |
| Contract Research | 26,890 | 33,403 |
| **National Aeronautics and Space Administration** | **2,162** | **5,337** |
| Ames Research Center Training Program | (6) | 1 |
| Flight Research Center Training Program | 0 | 1 |
| Langley Research Center Training Program | 1 | 6 |
| Lewis Research Center Training Program | 10 | 21 |
| Research Grants and Contracts | 2,150 | 5,300 |
| Space Flight Center Training Program | | 8 |
| **National Science Foundation** | **53,834** | **59,572** |
| Academic Year Institutes for Teachers | 1,873 | 3,077 |
| Basic Research Grants | 19,412 | 25,700 |
| Course Content Improvement Grants | 4,902 | 4,040 |
| Graduate Fellowships | 4,284 | 4,628 |
| Inservice Institutes for Teachers | 1,023 | 1,337 |
| Postdoctoral Fellowships | 986 | 961 |
| Research Facilities Grants | 10,311 | 6,800 |
| Research Participation Grants | 937 | 1,883 |
| Science Faculty Fellowships | 1,040 | 1,087 |
| Secondary School Teacher Fellowships | 994 | 731 |
| Special Field Institutes Grants | 171 | 192 |
| Summer Conferences for Teachers | 177 | 202 |
| Summer Institutes for Teachers | 6,488 | 7,579 |
| Summer Science Training for Secondary School Students | 936 | 1,037 |
| Supplementary Training for Science Teachers | 300 | 318 |
| **Veterans' Administration [5]** | **17,245** | **12,248** |
| Readjustment Training Program | 16,708 | 11,685 |
| Vocational Rehabilitation Program | 247 | 153 |
| War Orphans Educational Assistance | 290 | 410 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 5.
[3] Includes awards for first 10 months of fiscal year 1960.
[4] Program in operation but actual expenditures began in 1960.
[5] Office of Education estimate based on data provided by agency concerned.
[6] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

institutes grants, research fellowships of NIH, research and university teaching grants under the Educational Exchange Program, and costs of training Federal military and civilian personnel in educational institutions. Most of the funds at the graduate level are for AEC contract research, fellowships, and other programs and NSF fellowships and teacher-training institutes grants. Other programs at the graduate level include NIH research fellowships, fellowships under the National Defense Education Act, study grants under the Educational Exchange Program, and training of Federal military and civilian personnel in educational institutions.

Veterans' education accounts for most of the amounts reported at the undergraduate level. Other funds include NSF research participation and special field institutes grants and support of instruction in land-grant colleges and at Howard University. The data on veterans' education include funds at the graduate level which could not be reported separately. Vocational education grants to the States were reported at the adult education level and summer science training for secondary school students, supported by NSF, accounts for the amounts reported in elementary-secondary education. Most of the funds not reported by specific level were for NSF research grants and research facilities grants and research grants and contracts of NASA. Amounts by academic level, agency, and program are reported in table A-14 (p. 73).

### Table 30.—Federal Funds for Education in the Physical Sciences, by Academic Level: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | **$110,822** | **$126,139** |
| Postdoctoral | 3,113 | 3,094 |
| Graduate [1] | 48,666 | 60,676 |
| Undergraduate | 18,400 | 14,246 |
| Adult education | 2,746 | 5,000 |
| Elementary-secondary | 936 | 1,039 |
| Undistributed by specific level | | |
| Research | 26,464 | 35,040 |
| Facilities | 10,311 | 6,800 |
| Other | 188 | 243 |

[1] Data include AEC contract research classified by respondent at this level in the amount of $26.9 million for 1959 and $33.4 million for 1960.

NOTE: Because of rounding, detail may not add to totals.

## Types of Programs

Federal funds for education in the physical sciences are reported by type of program in table 31 below. The amounts for research account for 48 percent of total Federal funds in this field in fiscal year 1959 and 55 percent in fiscal 1960. The table and descriptive material following it indicate the content of each type of program.

**Table 31.—Federal Funds for Education in the Physical Sciences, by Type of Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$110,823** | **$126,139** |
| Research | 54,134 | 69,393 |
| Fellowships | 9,333 | 10,468 |
| Traineeships | 1,167 | 1,613 |
| Training grants | 12,201 | 16,552 |
| Facilities | 12,683 | 9,300 |
| Teaching grants | 370 | 408 |
| Military personnel | 143 | 335 |
| Federal employees | 30 | 81 |
| OTHER: | | |
| AEC special schools and courses | 3 | 12 |
| Educational exchange activities | 26 | 30 |
| Instruction | 741 | 697 |
| Training State and local officials | 0 | 3 |
| Veterans' education | 17,245 | 12,248 |
| Vocational education | 2,746 | 5,000 |

NOTE: Because of rounding, detail may not add to totals.

*Research.*—The amounts for research include research grants and contracts of AEC, NSF, and NASA and research grants under the Educational Exchange Program. The percentage for research of the total amount for the physical sciences is larger than that for any other field. It has been pointed out, however, that the data do not include significant amounts for research in educational institutions (and in research centers associated with them), which were not reported by the agencies.

*Fellowships.*—Fellowship programs in the physical sciences consist of AEC and NSF fellowships, NDEA fellowships, research fellowships of NIH, and study grants under the Educational Exchange Program.

*Traineeships.*—Traineeships in the physical sciences include costs of providing training in AEC-operated schools—the Oak Ridge School of Reactor Technology, the Puerto Rico Nuclear Center, and the International Institute of Nuclear Science and Engineering. The Department of Commerce provides training for foreign meteorologists and provides research associateships through the National Bureau of Standards.

*Training grants.*—Training grants in this field consist of NSF grants, grants to institutions under the NDEA fellowship program, and AEC-sponsored institutes for engineering faculty.

*Facilities.*—The amount for educational facilities consists of assistance to schools by AEC and research facilities grants of NSF.

*Teaching grants.*—The amount for teaching grants consists of Educational Exchange Program grants to university and elementary-secondary school teachers for actual teaching.

*Military personnel.*—The amount reported is for military personnel in training in educational institutions. Included in this category are expenses of Coast Guard officers in educational institutions.

*Federal employees.*—Federal employee outservice training in educational institutions was reported by NASA and the National Bureau of Standards.

*Other.*—Other funds in this field support veterans' education, vocational education, instruction in the physical sciences at land-grant colleges and at Howard University, advisory and consultation services under the Educational Exchange Program, AEC training in monitoring techniques, and training of State and local officials in food and drug inspection techniques.

## Recipients

The kind and number of individual participants in federally supported educational activities in this field are indicated in table 32. Most of the participants classified as graduate students are recipients of fellowship awards or participants in teacher training institutes. Undergraduate students consist largely of veterans in educational institutions and Howard University students. Professional trainees include research fellows under NIH programs and trainees in research and training programs of the National Bureau of Standards. Nonacademic trainees consist almost entirely of vocational education students beyond the secondary school level. Research personnel receiving grants under the Educational Exchange Program make up most of the "other" category.

Table 33 shows the number of individual recipients in selected types of programs. These individuals are part of the total number of

### Table 32.—Kind and Number of Individuals Participating in Educational Activities in the Physical Sciences Supported by Federal Funds: Fiscal Years 1959 and 1960

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| **Total** | **89,108** | **101,181** |
| Graduate students | 16,103 | 18,947 |
| Undergraduate students | 24,910 | 21,433 |
| Trainees, professional | 272 | 533 |
| Trainees, nonacademic | 47,562 | 60,007 |
| Teachers, Educational Program | 84 | 84 |
| Other individuals | 177 | 177 |

individual recipients in the physical sciences reported in table 32, where they may be included in one or more of the categories listed. The number of individual recipients in training grant programs includes only those individuals in programs for which Federal agencies were able to report individual participants. Such data were not available to the agencies for all training grant programs.

### Table 33.—Number of Individual Recipients Participating in Educational Activities in the Physical Sciences Supported by Federal Funds, by Selected Type of Program and Agency: Fiscal Years 1959 and 1960

| Type of program and agency | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| **Fellowships** | **2,808** | **3,083** |
| Department of Health, Education, and Welfare | 100 | 384 |
| Department of State | 274 | 274 |
| Atomic Energy Commission | 135 | 150 |
| National Science Foundation | 2,299 | 2,275 |
| **Traineeships** | **227** | **323** |
| Department of Commerce | 25 | 37 |
| Atomic Energy Commission | 202 | 286 |
| **Training grants** [1] | **12,398** | **15,557** |
| Atomic Energy Commission | 125 | 175 |
| National Science Foundation | 12,273 | 15,382 |
| **Teaching grants** | **84** | **84** |
| Department of State | 84 | 84 |

[1] Data incomplete. See text.

## Social Sciences

The social sciences include such areas as history, military science, political science, social psychology, sociology, and archeology. A list of the areas included in this field may be found in appendix B. The amount of Federal funds for educational activities in the social sciences was the least amount reported for any single field of study, accounting for 2.6 percent of the amounts reported by responding agencies by specific fields of study for each of the fiscal years 1959 and 1960.

### Table 34.—Federal Funds for Education in the Social Sciences, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 [1] |
|---|---|---|
| **Total** [2] | **$26,784** | **$28,396** |
| **Department of Health, Education, and Welfare** | **6,272** | **8,842** |
| Instruction in Land-Grant Colleges and Universities | 371 | 375 |
| Howard University: Curriculum | 126 | 131 |
| Training Grants and Fellowships, Institute of Mental Health | 3,652 | 4,297 |
| Research Fellowships, NIH | 172 | [3] 278 |
| NDEA Fellowships: Institutional Grants | (4) | 620 |
| NDEA Fellowships | (4) | 612 |
| Rehabilitation Training Grants, OVR | 1,950 | 2,529 |
| **Department of Commerce** | **82** | **89** |
| Training Foreign Census Technicians | 82 | 89 |
| **Department of Defense** | **5** | **9** |
| Professional Training for Army Medical Service Officers | 4 | 8 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 1 | 1 |
| **Department of State** [5] | **7,187** | **7,932** |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 1,008 | 1,113 |
| Study Grants, Educational Exchange Program | 3,251 | 3,588 |
| Grants for Observation and Consultation, Educational Exchange Program | 1,364 | 1,505 |
| Research Grants, Educational Exchange Program | $398 | $440 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 452 | 499 |
| University Teaching Grants, Educational Exchange Program | 714 | 788 |
| **National Aeronautics and Space Administration** | ---------- | (6) |
| Space Flight Center Training Program | ---------- | (6) |
| **National Science Foundation** | **1,168** | **2,491** |
| Basic Research Grants | 889 | 2,100 |
| Course Content Improvement Grants | 101 | 122 |
| Graduate Fellowships | 117 | 198 |
| Postdoctoral Fellowships | 45 | 17 |
| Research Participation Grants | 0 | 52 |
| Special Field Institutes Grants | 15 | 0 |
| Summer Science Training for Secondary School Students | 0 | 1 |
| **Tennessee Valley Authority** | **33** | **31** |
| Cooperative Research, Test, and Demonstration Grants | 33 | 31 |
| **Veterans' Administration** [5] | **12,038** | **9,001** |
| Readjustment Training Program | 11,552 | 8,510 |
| Vocational Rehabilitation Program | 272 | 197 |
| War Orphans Educational Assistance | 214 | 294 |

[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 5.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Program in operation but actual expenditures began in 1960.

[5] Office of Education estimate based on data provided by agency concerned.

[6] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

Department of Health, Education, and Welfare, Department of State, and Veterans' Administration programs in the social sciences account for 95 percent of the total reported in this field for fiscal year 1959 and for almost 91 percent in 1960. The National Science Foundation also reported significant amounts in research grant and fellowship programs. The programs of these agencies and of other agencies supporting activities in the social sciences are listed in table 34.

### Academic Level

Federal funds for education in the social sciences are reported by academic level in table 35. Most of the amounts at the postdoctoral level were for research grants and university teaching grants of the Educational Exchange Program, with smaller amounts for NIH research fellowships and NSF postdoctoral and science faculty fellowships. Amounts at the graduate level, accounting for 34 percent and 42 percent of the total in the field for fiscal years 1959 and 1960, respectively, include NIH and NDEA fellowships of the Department of Health, Education, and Welfare; study grants of the Educational Exchange Program; NSF fellowships and special field institute grants; training of foreign census technicians in the Bureau of the Census, part of the ICA program in public administration; and professional training for military medical personnel.

Amounts reported for undergraduate programs, 46 percent and 33 percent of the total, consist largely of payments for veterans' education. At the elementary-secondary level, NSF reported grants for summer science training for secondary school students. Amounts not reported by specific level consist of grants for advisory services, technical training, consultation, and for training of school personnel under the Educational Exchange Program and research grants and contracts of NSF and the Tennessee Valley Authority (TVA). Federal funds for education in the social sciences are reported by academic level, agency, and program in table A-15 (p. 74).

**Table 35.—Federal Funds for Education in the Social Sciences, by Academic Level: Fiscal Years 1959 and 1960**

[Thousand of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | $26,784 | $28,396 |
| Postdoctoral | 1,219 | 1302 |
| Graduate | 9,179 | 12,155 |
| Undergraduate | 12,539 | 9,568 |
| Elementary-secondary | 0 | 1 |
| Undistributed by specific level: | | |
| Educational Exchange Program grants | 2,824 | 3,117 |
| Research | 1,024 | 2,253 |

NOTE: Because of rounding, detail may not add to totals.

### Types of Programs

Federal funds for education in the social sciences are reported by type of program in table 36. Fellowship awards account for 13 and 16 percent of the total in this field in fiscal years 1959 and 1960, respectively. Training grants account for 20 and 26 percent of the total in this field for the same years. Payments for support of veterans' education account for the largest share of the amounts reported. The table and the descriptive material following it indicate the content of each type of program.

**Table 36.—Federal Funds for Education in the Social Sciences, by Type of Program: Fiscal Years 1959 and 1960**

[Thousand of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | $26,784 | $28,396 |
| Research | 1,421 | 2,693 |
| Fellowships | 3,585 | 4,693 |
| Traineeships | 82 | 89 |
| Training grants | 5,617 | 7,499 |
| Teaching grants | 1,166 | 1,287 |
| Military personnel | 5 | 9 |
| OTHER: | | |
| Educational exchange activities | 2,372 | 2,618 |
| Instruction | 497 | 506 |
| Veterans' education | 12,038 | 9,001 |

NOTE: Because of rounding, detail may not add to totals.

*Research.*—Research in the social sciences includes grants for basic research and course content improvement of NSF, research grants of the Educational Exchange Program in the Department of State, and cooperative research grants of TVA.

*Fellowships.*—Fellowships under the National Defense Education Act and study grants under the Educational Exchange Program account for most of the amounts reported in this category. NIH research fellowships and NSF fellowships are also included.

*Traineeships.*—Training of foreign census technicians by the Bureau of the Census, Department of Commerce, is the only program classified in this category.

*Training grants.*—This category includes grants of the Office of Vocational Rehabilitation, NIH grants, special grants of NSF, and grants to institutions under the NDEA fellowship program.

*Teaching grants.*—Teaching grants were made under the Educational Exchange Program of the Department of State.

*Military personnel.*—The training of military medical personnel in educational institutions was reported in this field.

*Other.*—Other programs in the social sciences include support of instruction at land-grant colleges and Howard University, veterans' education, and the Educational Exchange Program grants for advisory and consultative services.

### Recipients

The kind and number of individual participants in federally supported educational activities in the social sciences are indicated in table 37. Graduate students include recipients of fellowships under the Educational Exchange Program, NDEA, and under NIH and NSF fellowship programs. NASA reported one graduate-level student in this field in its outservice training program for employees. Undergraduate students are veterans enrolled in the social sciences and also students at Howard University, with smaller numbers of students reported under NIH training grants and NSF research participation grants programs.

Professional trainees include individuals in training under grants programs in social work, speech pathology and audiology, and rehabilitation counseling of the Office of Vocational Rehabilitation; trainees under NIH grants in social psychology, undergraduate psychology, and social work; undergraduate research participants under NSF grants; foreign census technicians in training at the Bureau of the Census, trainees in the ICA program in public administration; and military medical personnel in specialized training at educational institutions. Teachers are recipients of teaching and teacher training grants; other individuals are recipients of grants for advisory services and consultation, and recipients of research grants, all under the Educational Exchange Program of the Department of State.

Table 38 shows the number of individual recipients by type of program for major types of programs. These recipients are part of the total number of individuals reported in table 37, where they may be included in one or more of the categories listed. The number of individuals participating in training grant programs includes only those in programs for which the agencies could report individual participants. Such data were not available to the agencies for all training grant programs.

**Table 37.—Kind and Number of Individuals Participating in Educational Activities in the Social Sciences Supported by Federal Funds: Fiscal Years 1959 and 1960**

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| **Total** | **22, 518** | **20, 376** |
| Graduate students | 844 | 1, 158 |
| Undergraduate students | 18, 958 | 16, 382 |
| Trainees, professional | 1, 814 | 1, 934 |
| Teachers, Educational Exchange Program | 267 | 267 |
| Other individuals | 635 | 635 |

**Table 38.—Number of Individual Recipients Participating in Educational Activities in the Social Sciences Supported by Federal Funds, by Selected Type of Program and Agency: Fiscal Years 1959 and 1960**

| Type of program and agency | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| **Fellowships** | **856** | **1, 166** |
| Department of Health, Education, and Welfare | 53 | 346 |
| Department of State | 744 | 744 |
| National Science Foundation | 59 | 76 |
| **Traineeships** | **212** | **224** |
| Department of Commerce | 212 | 224 |
| **Training grants** [1] | **1, 570** | **1, 783** |
| Department of Health, Education, and Welfare | 1, 570 | 1, 664 |
| National Science Foundation | 0 | 119 |
| **Teaching grants** | **267** | **267** |
| Department of State | 267 | 267 |

[1] Data incomplete. See text.

## Other Fields of Study

Educational activities in "other" fields of study include those which could not be classified under any of the specific fields previously discussed. Such fields as business administration, English and journalism, foreign languages, law, and library science are included here. Activities which involved more than one field of study and which could not be reported separately account for much of the content of this category. Combinations of fields such as biological and physical sciences, engineering and physical sciences, research grants and contracts in various fields of science, and science, mathematics, and foreign languages are included in this discussion.

Federal activities in "other" fields of study account for 46.2 percent of the amounts reported by specific fields of study for each of fiscal years 1959 and 1960. The Department of Defense reported 43 percent of the total expenditures in this category in fiscal year 1959 and 50 percent in 1960, most of it in research contracts with educational institutions. Federal funds in "other" fields of study are reported by agency and program in table 39.

## Academic Level

Federal funds for educational activities in "other" fields of study are reported by academic level in table 40. Almost half of the amount is classified as undistributed by specific level for each of the years, most of it for research and development contracts of the Department of Defense. Most of the amount at the postdoctoral level is for NIH training grants and research fellowships and

### Table 39.—Federal Funds for Education in Other Fields of Study, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$484,934** | **$500,524** |
| **Department of Health, Education, and Welfare** | **93,740** | **114,391** |
| *Civil Defense Adult Education* | ---------- | 557 |
| Improvement in Science, Mathematics and Foreign Language Instruction | 56,000 | 60,000 |
| Instruction in Land-Grant Colleges and Universities | 657 | 650 |
| Vocational Education | 24,077 | 25,851 |
| Howard University: Curriculum | 728 | 893 |
| Howard University: Staff Expenses | 88 | 78 |
| Rehabilitation Research Fellowships, OVR | 42 | 103 |
| Rehabilitation Research and Demonstration Project Grants, OVR | 4,600 | 6,500 |
| Training at the Robert A. Taft Sanitary Engineering Center | 318 | 476 |
| Grants to States for Public Health Personnel | 1,272 | 1,423 |
| Training Grants, Heart Institute | 218 | 120 |
| Research Fellowships, NIH | 249 | [3] 2,861 |
| Traineeships for Public Health Personnel and Nurses | 2,561 | 3,074 |
| Chaplain Training at Saint Elizabeths Hospital | [4] 3 | [4] 6 |
| Training State Personnel in Child Welfare Agencies | 1,133 | (5) |
| Training State Personnel in Public Assistance Agencies | [4] 669 | [4] 10 |
| NDEA Fellowships: Institutional Grants | (7) | 583 |
| NDEA Fellowships | (7) | 575 |
| Counseling and Guidance Institutes, NDEA | (7) | 3,388 |
| Research and Studies in Language Development, NDEA | (7) | 3,390 |
| Language Development Institutes, NDEA | (7) | 2,566 |
| Rehabilitation Training Grants, OVR | 1,123 | 1,288 |
| **Department of Defense** | **211,417** | **251,783** |
| Professional Training for Army Medical Service Officers | 92 | 128 |
| Cooperative Work-Study Program for Navy Employees | 429 | 383 |
| Education at Civilian Institutions for Army Personnel | 261 | 290 |
| Education at Civilian Institutions for Navy Personnel | 293 | 520 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 19 | 22 |
| Professional Training for Air Force Medical Officers | 17 | 17 |
| Research and Development Contracts | 207,253 | 246,176 |
| U.S. Air Force Institute of Technology-Nonresident Training | 3,052 | 4,248 |
| **Department of Justice** | **234** | **231** |
| FBI National Academy | 9 | 6 |
| Police Training Schools | 225 | 225 |
| **Department of Labor** | **3,167** | **3,400** |
| Training in Labor and Allied Fields for Foreign Visitors | 3,167 | 3,400 |
| **Department of State[8]** | **8,192** | **9,041** |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 660 | 729 |
| Study Grants, Educational Exchange Program | 4,468 | 4,931 |
| Grants for Observation and Consultation, Educational Exchange Program | 1,128 | 1,245 |
| Research Grants, Educational Exchange Program | 329 | 363 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 997 | 1,101 |
| *University Teaching Grants, Educational Exchange Program* | 609 | 672 |
| **Department of the Treasury** | **1,058** | **1,035** |
| Training Enforcement Personnel of the Internal Revenue Service | 1,051 | 1,023 |
| U.S. Coast Guard Officer Specialized Training | 6 | 12 |
| **Canal Zone** | **29** | **30** |
| Apprentice School, Panama Canal Company | 29 | 30 |
| **Federal Aviation Agency** | **1,008** | **1,069** |
| Technical Training in Aviation for Foreign Nationals | 994 | 1,034 |
| Outservice Training of Employees | 14 | 34 |
| **Federal Deposit Insurance Corporation** | **14** | **16** |
| Employee Training in Bank Examining and Auditing | 14 | 16 |
| **National Aeronautics and Space Administration** | **0** | **4** |
| Flight Research Center Training Program | 0 | (9) |
| Langley Research Center Training Program | 0 | 1 |
| Lewis Research Center Training Program | 0 | 2 |
| Space Flight Center Training Program | 0 | 1 |
| **National Science Foundation** | **27,227** | **24,569** |
| Academic Year Institutes for Teachers | 6,914 | 6,134 |
| Course Content Improvement Grants | 191 | 156 |
| Inservice Institutes for Teachers | 806 | 797 |
| Research Participation Grants | 919 | 885 |
| Science Faculty Fellowships | 8 | 0 |
| Secondary School Teacher Fellowships | 129 | 120 |
| Special Projects in Science Education | 3,800 | 4,035 |
| Summer Institutes for Teachers | 14,043 | 11,995 |
| Summer Science Training for Secondary School Students | 305 | 421 |
| Supplementary Training for Science Teachers | 113 | 27 |
| **Small Business Administration** | **(5)** | **(5)** |
| Management Training Courses | (5) | (5) |
| **Veterans' Administration[8]** | **138,848** | **94,955** |
| Readjustment Training Program | 130,895 | 87,800 |
| Vocational Rehabilitation Program | 5,742 | 4,181 |
| War Orphans Educational Assistance | 2,211 | 2,974 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 8.
[3] Includes awards for first 10 months of fiscal year 1960.
[4] Data incomplete.
[5] Data not available.
[6] Includes some State funds.
[7] Program in operation but actual expenditures began in 1960.
[8] Office of Education estimate based on data provided by agency concerned.
[9] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

### Table 40.—Federal Funds for Education in Other Fields of Study, by Academic Level: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | **$484,934** | **$500,524** |
| Postdoctoral | 1,314 | 3,099 |
| Graduate | 32,130 | 37,716 |
| Undergraduate | 139,335 | 96,498 |
| Adult education | 12,817 | 14,229 |
| Elementary-secondary | 75,695 | 79,847 |
| Undistributed by specific level | | |
| Research | 212,044 | 255,248 |
| Combined levels | 11,600 | 13,889 |

NOTE: Because of rounding, detail may not add to totals.

for research grants and university teaching grants under the Educational Exchange Program. Reported as graduate level are NIH research fellowships, PHS traineeships for public health personnel and nurses, grants for the training of State personnel in child welfare and public assistance agencies, NDEA fellowships and institute grants, study grants under the Educational Exchange Program, NSF institutes for science teachers, and training of military personnel in educational institutions.

Support of instruction at land-grant colleges and Howard University, veterans' education (including funds for graduate level training which could not be reported separately), education of military personnel at educational institutions, and NSF research participation grants and special projects in science education are reported at the undergraduate level. Adult education activities include vocational education, civil defense training, technical training in aviation for foreign nationals, and vocational rehabilitation training for veterans. At the elementary-secondary level, programs for the improvement of instruction in science, mathematics, and foreign languages under the National Defense Education Act, vocational education, and special projects and summer science training for secondary school students under NSF sponsorship are reported. Amounts are listed by academic level, agency, and program in table A–16 (p. 74).

### Types of Programs

Federal funds for education in "other" fields of study are reported by type of program in table 41. Research accounted for more than 43 percent of total support in this area in fiscal 1959 and increased to 51 percent in fiscal 1960. The program content of each category is indicated in the table and in the descriptive material following it.

### Table 41.—Federal Funds for Education in Other Fields of Study by Type of Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$484,934** | **$500,524** |
| Research | 212,373 | 255,612 |
| Fellowships | 4,896 | 9,064 |
| Traineeships | 2,882 | 7,519 |
| Training grants | 24,441 | 24,740 |
| Facilities | 56,000 | 60,000 |
| Teaching grants | 1,606 | 1,773 |
| Military personnel | 3,740 | 5,237 |
| Federal employees | 1,508 | 1,460 |
| OTHER: | | |
| Civil defense education | 0 | 557 |
| Educational exchange activities | 1,788 | 1,974 |
| FBI schools | 234 | 231 |
| Grants to States for training public health, welfare, and assistance personnel | 3,074 | 1,433 |
| Instruction | 1,473 | 1,621 |
| Special science projects | 3,800 | 4,035 |
| Technical training | 4,190 | 4,464 |
| Veterans' education | 138,848 | 94,955 |
| Vocational education | 24,077 | 25,851 |

NOTE: Because of rounding, detail may not add to totals.

*Research.*—Research and development contracts of the Department of Defense account for most of the amount reported in this field. Research in language development under NDEA, research grants of the Office of Vocational Rehabilitation (OVR), NSF, and under the Educational Exchange Program of the Department of State are also included.

*Fellowships.*—Fellowships in "other" fields of study include regular and language fellowships under NDEA, research fellowships of OVR and NIH, study grants under the Educational Exchange Program, and fellowships supported by NSF.

*Traineeships.*—Support of training of public health personnel; training at the Robert A. Taft Sanitary Engineering Center; chaplain training at St. Elizabeths Hospital; and NDEA counseling, guidance, and language development institutes are included in this category.

*Training grants.*—Support of counseling and guidance institutes, language area centers, and grants to institutions under the fellowship program of NDEA are included under training grants. Training grant programs of OVR, NIH, and NSF are also included.

*Facilities.*—Grants and loans under title III of NDEA for equipment and supplies to improve instruction in science, mathematics, and foreign languages are included in the amount for facilities.

*Teaching grants.*—The amount for teaching grants consists of the Educational Exchange Program teaching grants to university and elementary-secondary school teachers.

*Military personnel.*—The amount for military personnel is for expenses of military personnel in civilian medical schools and in other educational institutions. It also includes specialized training in educational institutions for officers of the U.S. Coast Guard.

*Federal employees.*—Employee outservice training of NASA, training of enforcement personnel of the Internal Revenue Service, and the cooperative work-study program of the Navy are included in the amount for Federal employees.

*Other.*—Other types of programs include grants for instruction at land-grant colleges and Howard University, NSF special science projects, grants to States for training public health and public assistance personnel, the conduct of police training schools and the FBI Academy by the Department of Justice, training of foreign nationals by the Federal Aviation Agency, and support of the apprentice school of the Panama Canal Company.

### Recipients

The kind and number of individual participants in federally supported educational activities in "other" fields of study are listed in table 42. Most of the graduate students are participants in teacher-training institutes sponsored by NSF for science teachers or in the counseling, guidance, and language development institutes of NDEA. Also included are recipients of NSF and NDEA fellowships, NIH research fellowships, and study grants under the Educational Exchange Program. Undergraduate students are veterans (including some graduate students who could not be reported separately), students at Howard University, and military personnel in training at educational institutions. Elementary-secondary students are enrollees in vocational education classes.

Professional trainees include NIH research fellowships for advanced, specialized research and training; fellows and trainees under rehabilitation training grants of OVR; military personnel in specialized training in educational institutions; and trainees at the Robert A. Taft Sanitary Engineering Center of the U.S. Public Health Service. Nonacademic trainees are accounted for largely by persons enrolled in adult level vocational education classes. Teachers are recipients of grants under the Educational Exchange Program. Other individuals are participants in advisory, technical training, and counseling services in the Educational Exchange Program and recipients of research grants under the same program.

Table 42.—Kind and Number of Individuals Participating in Educational Activities in Other Fields of Study Supported by Federal Funds: Fiscal Years 1959 and 1960

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| **Total** | **3,166,394** | **3,192,853** |
| Graduate students | 19,500 | 20,927 |
| Undergraduate students | 159,022 | 118,060 |
| Elementary-secondary students | 1,267,264 | 1,298,000 |
| Trainees, professional | 8,620 | 8,762 |
| Trainees, nonacademic | 1,711,134 | 1,746,246 |
| Teachers, Educational Program | 368 | 368 |
| Other individuals | 486 | 490 |

Table 43 shows the number of individual recipients in selected types of programs in "other" fields of study. These recipients are part of the total number reported in table 42, where they may be included in one or more of the categories listed.

The number of individual recipients in training grant programs includes only those in programs for which such data were available to the Federal agencies concerned.

Table 43.—Number of Individual Recipients Participating in Educational Activities in Other Fields of Study Supported by Federal Funds, by Selected Type of Program and Agency: Fiscal Years 1959 and 1960

| Type of program and agency | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| **Fellowships** | **1,119** | **1,995** |
| Department of Health, Education, and Welfare | 41 | 927 |
| Department of State | 1,022 | 1,022 |
| National Science Foundation | 56 | 46 |
| **Traineeships** | **1,705** | **5,970** |
| Department of Health, Education, and Welfare | 1,705 | 5,970 |
| **Training grants**[1] | **20,059** | **16,695** |
| Department of Health, Education, and Welfare | 2,281 | 2,207 |
| National Science Foundation | 17,778 | 14,488 |
| **Teaching grants** | **368** | **368** |
| Department of State | 368 | 368 |

[1] Data incomplete. See text.

## Undistributed by Specific Field: General Education

Federal funds for general education include funds for education or training in general, rather than in a specific field of study or combination of fields. Programs of the Department of Health, Education, and Welfare account for 50 percent of total Federal support in this category in fiscal year 1959 and for 45 percent in 1960. Amounts reported by this agency were primarily for school assistance in federally affected areas and surplus property transferred to educational institutions. The latter was reported in terms of original cost to the Federal Government, and estimates of actual value at time of transfer range from about 10 percent to 40 percent of this acquisition cost.

Large amounts were also reported by the Department of Defense, the Department of the Interior, and the Veterans Administration. Federal funds for general education are listed by agency and program in table 44.

Amounts for general education account for 42.6 percent of total Federal funds for education in fiscal year 1959 and 46.5 percent in fiscal 1960. This high percentage results from the large amounts involved in the programs just mentioned in addition to education of dependents of military personnel overseas, support of the military academies and off-duty education for military personnel, college housing loans in 1960 (see table 44), public schools for Indians, veterans' education, and other programs. These programs are listed by academic level, agency, and program in table A-17 (p. 76).

**Table 44.—Federal Funds for General Education, by Agency and Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Agency and program | Amount by year | |
|---|---|---|
| | 1959 | 1960[1] |
| **Total[2]** | **$1,014,461** | **$1,254,587** |
| **Department of Health, Education and Welfare** | **510,485** | **566,291** |
| School Assistance in Federally Affected Areas | 215,066 | 233,500 |
| Vocational Education | 8 | 5 |
| American Printing House for the Blind | 410 | 410 |
| Gallaudet College | 881 | 1,116 |
| Howard University: Construction | 286 | 881 |
| Howard University: Operation | 569 | 575 |
| Howard University: Staff Expenses | 54 | 56 |
| Education in Public Health Service Hospitals | 16 | 17 |
| Training Grants and Fellowships, Institute of Mental Health | 828 | 542 |
| Research Fellowships, NIH | 0 | [3] 70 |
| Surplus Property, Original Cost | 292,366 | 319,500 |
| Student Loan Fund, NDEA | (4) | 9,619 |
| **Department of Agriculture** | **22,880** | **30,243** |
| School Support from National Forest Revenue[5] | 22,322 | 29,782 |
| School Support from Submarginal Land Revenue[5] | 558 | 460 |
| **Department of Defense** | **86,996** | **92,437** |
| Education of Dependents of Military Personnel | 29,699 | 33,700 |
| Education of Civilian Employees | 2,645 | 3,938 |
| Education at Civilian Institutions for Navy Personnel | 3,966 | 4,113 |
| Public Schools in Northern Mariana—Saipan District | 103 | 101 |
| Off-Duty Education of Active Military Personnel | 12,081 | 12,199 |
| U.S. Air Force Academy | 15,770 | 15,882 |
| U.S. Military Academy | 12,401 | 12,112 |
| U.S. Naval Academy | 10,332 | 10,392 |
| **Department of the Interior** | **100,349** | **104,644** |
| Public Schools in the Pribilof Islands | 51 | 51 |
| Public Schools for Indians | 47,321 | 50,597 |
| School Support from Public Land Revenue[5] | 51,276 | 53,250 |
| Education of Dependents of National Park Service Employees | 38 | 59 |
| Public Schools in the Trust Territory of the Pacific Islands[6] | 399 | 419 |
| Public Schools in American Samoa[6] | 218 | 268 |
| Alaska School Construction | 1,047 | ---------- |
| **Department of Justice** | **$1,182** | **$1,373** |
| Education and Vocational Training in Penal Institutions | 1,182 | 1,373 |
| **Department of Labor** | **4,009** | **4,047** |
| Promotion of Apprenticeship and Training | 4,009 | 4,047 |
| **Department of the Treasury** | **4,105** | **4,187** |
| U.S. Coast Guard Academy | 4,068 | 4,150 |
| Education of Dependents of U.S. Coast Guard Personnel | 37 | 37 |
| **Atomic Energy Commission** | **4,958** | **4,347** |
| Public Schools at AEC Facilities | 4,958 | 4,347 |
| **Canal Zone** | **4,990** | **7,825** |
| Public Schools | 4,990 | 7,825 |
| **District of Columbia** | **7,742** | **7,734** |
| Public Schools | 7,742 | 7,734 |
| Education in Public Welfare Institutions | (7) | (7) |
| **Housing and Home Finance Agency** | **0** | **250,000** |
| College Housing Loans[8] | 0 | 250,000 |
| **Library of Congress** | **1,368** | **1,619** |
| Reading Material for the Blind | 1,368 | 1,619 |
| **National Aeronautics and Space Administration** | **0** | **(9)** |
| Space Flight Center Training Program | 0 | (9) |
| **Veterans' Administration[6]** | **265,397** | **179,840** |
| Readjustment Training Program | 252,583 | 166,141 |
| Vocational Rehabilitation Program | 10,160 | 9,144 |
| War Orphans Educational Assistance | 2,654 | 4,555 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 6.
[3] Includes awards for first 10 months of fiscal year 1960.
[4] Program in operation but actual expenditures began in 1960.
[5] Payments to be used for roads or schools as determined by each State.
[6] Office of Education estimate based on data provided by agency concerned.
[7] Data not available.
[8] Reported on the basis of funds authorized. Actual loans approved were $155 million in 1959 and $172 million in 1960.
[9] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

### Academic Level

About one-third of the amounts for activities in general education are at the elementary-secondary level, most of it for school assistance in federally affected areas, education of dependents of military personnel overseas, support of education from public land and national forest revenues (some of which may be used for other purposes at the discretion of the State legislatures), and support of public schools in Territories and dependencies. Research fellowships of NIH and support of special graduate programs at Gallaudet College account for the amounts at the postdoctoral and graduate levels. Veterans' education and the military academies are classified at the undergraduate level. Amounts undistributed by specific level are for college housing loans, surplus property transferred for educational uses, and miscellaneous purposes. Table 45 summarizes funds for general education by academic level. (See table A-17, p. 76, for a complete list of programs by academic level and agency.)

**Table 45.—Federal Funds for General Education, by Academic Level: Fiscal Year 1959 and 1960**

[Thousands of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | **$1, 014, 461** | **$1, 254, 587** |
| Postdoctoral | 0 | 60 |
| Graduate | 35 | 74 |
| Undergraduate | 122, 567 | 107, 529 |
| Adult education | 197, 844 | 138, 436 |
| Elementary-secondary | 383, 285 | 418, 443 |
| Undistributed by specific level | | |
| Original cost of surplus property transferred | 292, 366 | 319, 500 |
| College housing loans [1] | 0 | 250, 000 |
| Other | 18, 364 | 20, 545 |

[1] Reported on the basis of funds authorized. See table 44.

NOTE: Because of rounding, detail may not add to totals.

### Types of Programs

Federal funds for general education are listed by type of program in table 46. Programs for facilities, school assistance, and veterans' education account for most of the large amounts reported in this field. The table and the descriptive material following it indicate the program content of each of the categories listed.

*Fellowships.*—Research fellowships in this field were reported by NIH for fiscal year 1960.

*Training grants.*—Special grants and pilot projects of the National Institute of Mental Health account for most of the amount in this classification. Smaller amounts were reported for teacher training at Gallaudet College.

*Facilities.*—Included in this classification is the surplus property program administered by the Department of Health, Education, and Welfare. The acquisition cost of such property constitutes 78 percent of the amount reported for facilities in fiscal 1959 and 49 percent in fiscal 1960. College housing loans were reported for fiscal 1960.[2] Another large program included is aid for school construction in federally affected areas—20 percent of the total in this category for fiscal year 1959 and 11 percent for 1960. Other programs included are construction at Gallaudet College, Howard University, and in special areas such as the District of Columbia and the Canal Zone.

**Table 46.—Federal Funds for General Education, by Type of Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$1, 014, 461** | **$1, 254, 587** |
| Fellowships | 0 | 70 |
| Training grants | 863 | 606 |
| Facilities [1] | 372, 069 | 647, 108 |
| Military personnel | 54, 862 | 54, 900 |
| Federal employees | 2, 645 | 3, 938 |
| OTHER: | | |
| Education of dependents | 29, 774 | 33, 796 |
| Federally Aided Corporations | 1, 756 | 1, 768 |
| Indian education | 47, 321 | 50, 597 |
| Navy "regular" ROTC | 3, 756 | 3, 948 |
| School aid, special areas | 16, 406 | 17, 343 |
| School assistance | 213, 038 | 243, 997 |
| Student loans, NDEA | 0 | 9, 619 |
| Veterans' education | 265, 397 | 179, 840 |
| Miscellaneous | 6, 575 | 7, 056 |

[1] Includes college housing loans for 1960 only. See table 44.

NOTE: Because of rounding, detail may not add to totals.

*Military personnel.*—Programs reported for military personnel include training of Navy personnel at civilian institutions, off-duty education of military personnel, and the Military and Coast Guard Academies.

*Federal employees.*—The cost of training civilian employees in educational institutions was reported by the Department of Defense.

*Other.*—Education of dependents includes principally the program for dependents of military personnel overseas. The amount for federally aided corporations includes funds for the American Printing House for the Blind and for support of Gallaudet College and Howard University not reported under facilities or training grants. School aid in special areas includes support of public schools in the District of Columbia, AEC facilities, and in U.S. Territories and dependencies. School assistance includes aid for maintenance and operation of schools in federally affected areas, payments to States from public land and national forest revenues for school and road uses, and a small amount for vocational education. Miscellaneous programs include elementary-secondary level instruction for patients in Public Health Service hospitals, education and training in Federal penal institutions, promotion of apprenticeship and training by the Department of Labor, and reading material for the blind provided by the Library of Congress.

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[2] See table 44, footnote 8.

### Recipients

The kind and number of individual participants reported in federally supported activities in general education are indicated in table 47. Graduate students include individuals in the specialized teacher-training program at Gallaudet College and recipients of NIH fellowships. Undergraduate students include recipients of student loans under NDEA, undergraduate students at Gallaudet College, students of the military and Coast Guard academies, and veterans in educational programs, including a small number of graduate students who could not be reported separately. Elementary-secondary students include students in the District of Columbia schools, dependents of military personnel overseas, pupils in public schools for Indians, students in federally supported schools in the Territories and dependencies and at AEC facilities, and students in vocational education classes classified in this field.

Table 47.—Kind and Number of Individuals Participating in Activities in General Education Supported by Federal Funds: Fiscal Years 1959 and 1960

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| **Total** | **1,655,670** | **1,616,989** |
| Graduate students | 18 | 36 |
| Undergraduate students | 95,578 | 97,321 |
| Elementary-secondary students | 382,557 | 400,165 |
| Trainees, professional | 0 | 8 |
| Trainees, nonacademic | 425,632 | 369,560 |
| Other individuals | 751,885 | 749,899 |

Professional trainees are recipients of NIH research fellowships; nonacademic trainees include students in vocational education schools for Indians, participants in education and vocational training programs within Federal penal institutions, participants in the apprenticeship and training program of the Department of Labor, and veterans in on-the-job training programs. Military personnel are participants in off-duty education programs. Federal employees are Department of Defense employees in outservice training programs. Other individuals include participants in correspondence study within Federal penal institutions and recipients of reading material for the blind provided by the Library of Congress.

Table 48 shows the number of individual recipients by type of program for major types of programs. These same individuals are included in table 47, where they may be classified in one or more of the categories listed.

Table 48.—Number of Individual Recipients Participating in Activities in General Education Supported by Federal Funds, by Selected Type of Program and Agency: Fiscal Years 1959 and 1960

| Type of program and agency | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| **Fellowships** | **0** | **11** |
| Department of Health, Education, and Welfare | 0 | 11 |
| **Training grants**[1] | **18** | **33** |
| Department of Health, Education, and Welfare | 18 | 33 |

[1] Data incomplete.

## Undistributed by Specific Field: Educational Services and Administration

Programs classified in this category are for administration of educational programs, provision of school services, or support of other educational activities not related to particular fields of study or general academic programs. (See table 49.) The administrative costs of most programs covered in the survey, however, were not requested or reported. Grants to States for the administration of educational programs and the administrative costs of the U.S. Office of Education are included in the tabulations—the first because they directly support educational services in the States, the second because of the responsibilities of the Office of Education in providing educational services.

Most of the amount in this area is for the school lunch program of the Department of Agriculture. Grants to the States for administration of educational programs and support of rural library services; costs of administering programs of the U.S. Office of Education; school bus service for dependents of military personnel; and the testing, counseling, and placement interview program for high school seniors of the Department of Labor are also included.

Veterans' on-the-job training was reported at the adult education level. At the elementary-secondary level, the school lunch program accounts for most of the amount reported. Federal funds for educational services and administration are reported by academic level and agency in table A-18 (p. 77).

Individual recipients in these programs include participants in the school lunch program; high school seniors receiving testing, counseling, and placement interview services from the Department of Labor; and dependents of military personnel receiving school bus services. Other recipients include veterans in on-the-job training programs and civil defense officials receiving special training.

**Table 49.—Federal Funds for Educational Services and Administration,[1] by Agency and Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Agency and program | 1959 | 1960[2] |
|---|---|---|
| **Total[3]** | **$317,516** | **$355,941** |
| **Department of Health, Education, and Welfare** | **23,340** | **38,856** |
| Administration of the Office of Education | 8,229 | 10,327 |
| Improvement of State Educational Statistical Services | 238 | 1,129 |
| Rural Library Services | 5,218 | 7,500 |
| Improvement in Science, Mathematics and Foreign Language Instruction | 1,350 | 4,000 |
| Secondary School Guidance, Counseling and Testing Services | 7,400 | 15,000 |
| Howard University: Operation | 905 | 901 |
| **Department of Agriculture** | **275,945** | **305,512** |
| School Lunch Program | 275,945 | 305,512 |
| **Department of Defense** | **435** | **450** |
| Education of Dependents of Military Personnel | 435 | 450 |
| **Department of Labor** | **3,765** | **4,815** |
| Testing, Counseling, and Placement Interviews for High School Seniors | 3,765 | 4,815 |
| **District of Columbia** | (4) | (4) |
| Education in Public Welfare Institutions | (4) | (4) |
| **National Aeronautics and Space Administration** | **1** | **0** |
| Flight Research Center Training Program | 1 | 0 |
| **Office of Civil and Defense Mobilization** | **1,741** | **891** |
| Operation of Civil Defense Schools | 529 | 575 |
| Support of State Training Programs in Civil Defense | 1,212 | 316 |
| **Veterans' Administration[5]** | **12,289** | **5,418** |
| Readjustment Training Program | 12,289 | 5,418 |

[1] Reported as "field of study not applicable" by respondents.
[2] Estimated by respondents.
[3] Includes Office of Education estimates for some programs. See footnote 5.
[4] Data not available.
[5] Office of Education estimate based on data provided by agency concerned.

NOTE: Because of rounding, detail may not add to totals.

## Section 3

# Academic Levels

FEDERAL funds for education were classified by academic level by the reporting agencies. These funds and the kind and number of recipients in each field of study have been analyzed by academic level in section 2. In the present section, total Federal funds for education will be analyzed by academic level.

Reporting agencies were asked to classify activities as for postdoctoral, graduate, undergraduate, adult, or elementary-secondary education, or for education at other levels. These levels are defined in the discussions by academic level which follow. It will be noted that the postdoctoral level includes activities beyond the doctorate in all fields, including the medical sciences. The graduate level includes activities beyond the undergraduate level and before the first professional degree. Educational activities and individuals in professional schools are classified at the graduate level if the responding agencies considered the programs and individuals concerned to be at that level. Federal funds for education undistributed by specific level include funds for activities which concern more than one level or which are not concerned with specific or combined levels of education.

Some programs involve training of individuals at one level for an educational activity at another level. Agencies were requested to use the academic level of the individual recipient in determining academic level. An institute for training teachers at the graduate level to improve instruction at the elementary-secondary level would therefore be classified at the graduate level.

Federal funds at each academic level are reported by field of study, agency, and program in tables A–9 through A–18 (p. 68-77). Table A–22, (p. 82), summarizes Federal funds for higher education at all levels. Table 50 below shows the amount of Federal funds for each academic level.

**Table 50.—Federal Funds for Education, by Academic Level: Fiscal Years 1959 and 1960**

[Thousands of dollars

| Academic level | 1959 | 1960[1] |
|---|---|---|
| Postdoctoral | 41, 481 | 53, 872 |
| Graduate | 137, 961 | 173, 570 |
| Undergraduate | 427, 230 | 325, 270 |
| Adult education | 309, 944 | 234, 748 |
| Elementary-secondary | 760, 719 | 839, 184 |
| Undistributed by specific level | | |
| Research and research facilities | 317, 635 | 378, 123 |
| Original cost of surplus property transferred | 292, 366 | 319, 500 |
| College housing loans[2] | 0 | 250, 000 |
| International educational activities | 37, 520 | 51, 364 |
| Other and combined levels | 56, 104 | 68, 117 |

[1] Estimated by respondents.

[2] Reported as funds authorized. Actual loans approved were $155 million in 1959 and $172 million in 1960.

NOTE: Because of rounding, detail may not add to totals.

## Postdoctoral Level

Funds at the postdoctoral level include educational programs beyond the doctorate in all fields, including the medical sciences.

Amounts of Federal funds at this level are reported by agency and program in table 51. Seven Federal agencies reported educational activities at the postdoctoral level. Programs of the Department of Health, Education, and Welfare provided 81 percent of total funds at this level in fiscal year 1959 and 86 percent in 1960, due primarily to the training grant and fellowship programs of the National Institutes of Health. Analysis of Federal support by individual fields of study is presented in section 2; and amount of support by field of study, academic level, agency, and program in tables A–9 through A–18 (p. 68-77).

A summary of Federal funds for education at the postdoctoral level for major types of programs is reported in table 52. The content of each type of program is outlined in the discussion below.

### Table 51.—Federal Funds for Education at the Postdoctoral Level, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$41,481** | **$53,872** |
| **Department of Health, Education, and Welfare** | **33,577** | **46,144** |
| Research Training Grants, NIH | 1,997 | 3,973 |
| Training Grants and Traineeships, Cancer Institute | 3,333 | 4,033 |
| Training Grants, Heart Institute | 4,842 | 5,398 |
| Training Grants, Institute of Allergy and Infectious Diseases | 1,024 | 1,686 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Diseases | 2,256 | 4,385 |
| Training Grants, Institute of Dental Research | 650 | 1,073 |
| Training Grants and Fellowships, Institute of Mental Health | 6,831 | 8,138 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 5,638 | [3] 7,284 |
| Research Fellowships, NIH | 6,883 | [3] 9,993 |
| Resident and Intern Training in the Clinical Sciences at St. Elizabeths Hospital | [1] 121 | 181 |
| **Department of Commerce** | **93** | **178** |
| Research and Training in the National Bureau of Standards | [1] 93 | 178 |
| **Department of Defense** | **$47** | **$44** |
| Medical Training for Navy Personnel in Civilian Medical Schools | 47 | 44 |
| **Department of State[4]** | **4,467** | **4,930** |
| Research Grants, Educational Exchange Program | 2,450 | 2,704 |
| University Teaching Grants, Educational Exchange Program | 2,017 | 2,227 |
| **Atomic Energy Commission** | **99** | **100** |
| Fellowships in Biology and Medicine | 99 | 100 |
| **National Aeronautics and Space Administration** | **0** | **1** |
| Lewis Research Center Training Program | 0 | 1 |
| **National Science Foundation** | **3,198** | **2,475** |
| Postdoctoral Fellowships | 1,884 | 1,785 |
| Science Faculty Fellowships | 1,125 | 555 |
| Special Field Institutes Grants | 188 | 135 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 4.
[3] Includes awards for first 10 months of fiscal year 1960.
[4] Office of Education estimate based on data provided by agency concerned.

NOTE: Because of rounding, detail may not add to totals.

*Research.*—The Educational Exchange Program research grants account for almost 6 percent of the total at the postdoctoral level in fiscal 1959 and 5 percent in 1960.

*Fellowships.*—Fellowship programs account for over 24 percent of the funds at this level for fiscal 1959, decreasing slightly to 23 percent for fiscal 1960. The major part of the amount for these programs is for research fellowships of the National Institutes of Health. The Atomic Energy Commission and the National Science Foundation also reported fellowship programs.

*Traineeships.*—Traineeship programs account for about 6 percent of the total for this level in each of the fiscal years. Included are traineeships of the Cancer Institute, Institute of Arthritis and Metabolic Diseases, and the Institute of Neurological Diseases and Blindness of the National Institutes of Health; trainees in the clinical sciences at St. Elizabeths Hospital; and trainees at the National Bureau of Standards.

### Table 52.—Federal Funds for Education at the Postdoctoral Level, by Type of Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$41,481** | **$53,872** |
| Research | 2,450 | 2,704 |
| Fellowships | 10,298 | 12,758 |
| Traineeships | 2,485 | 3,236 |
| Training grants | 24,174 | 32,888 |
| Teaching grants | 2,017 | 2,227 |
| Military personnel | 47 | 44 |
| Federal employees | 8 | 16 |

NOTE: Because of rounding, detail may not add to totals.

*Training grants.*—NIH training grants and research training grants and special field institutes of NSF are included in this category, which accounts for over 58 percent of the total at the postdoctoral level in fiscal 1959 and 61 percent in fiscal 1960.

*Teaching grants.*—University teaching grants of the Educational Exchange Program account for almost 5 percent of the total at this level in fiscal 1959 and 4 percent in fiscal 1960.

*Military personnel.*—A small amount for training of Navy personnel in civilian medical schools was reported.

*Federal employees.*—The employee outservice training programs of the Lewis Research Center of the National Aeronautics and Space Administration (NASA) and of the National Bureau of Standards are included in this category.

## Graduate Level

Federal funds for education at the graduate level include programs beyond the undergraduate level and below the postgraduate level. This level also includes funds for programs for training of individuals beyond the undergraduate level and before the first professional degree.

Federal funds at this level were reported by nine agencies. The Atomic Energy Commission provided one-third of the total, due primarily to the classification of contract research at this level. Most other research programs were not classified by specific level. They may be identified in table 59 and in the descriptive material concerning funds for activities classified in the "other levels" category.

Federal funds at the graduate level are reported by agency and program in table 53. Amounts by academic level are reported by field of study, agency, and program in tables A–9 through A–18 (p. 68–77).

A summary of Federal funds for education at the graduate level reports funds by type of program in table 54 below. The content of each type of program is described in the paragraphs below.

*Research.*—Atomic Energy Commission contract research accounts for most of the amounts reported as research. In addition, AEC supported research activities in the development of pedagogical tools and research participation in reactor technology.

*Fellowships.*—Four agencies reported funds for fellowship programs at the graduate level. The Department of Health, Education, and Welfare provided fellowships for improving education of the mentally retarded, research fellowships of the Office of Vocational Rehabilitation, research fellowships of NIH, and regular fellowships and language development fellowships under the National Defense Education Act. AEC fellow-

**Table 53.—Federal Funds for Education at the Graduate Level, by Agency and Program: Fiscal Years 1959 and 1960**

**[Thousands of dollars]**

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total**[2] | **$137,961** | **$173,570** |
| **Department of Health, Education, and Welfare** | **33,819** | **54,040** |
| Fellowships in Programs for the Education of the Mentally Retarded | (3) | 1,000 |
| Training State and Local Officials in Food and Drug Inspection Techniques | ---------- | 6 |
| Gallaudet College | 35 | 64 |
| Howard University: Curriculum | 1,156 | 1,334 |
| Rehabilitation Research Fellowships, OVR | 42 | 103 |
| Education in Public Health Service Hospitals | 5 | 5 |
| Training at the Robert A. Taft Sanitary Engineering Center | 318 | 476 |
| Experimental Training Grants to Medical Schools, NIH | 500 | 500 |
| Research Training Grants, NIH | 3,708 | 7,378 |
| Training Grants and Traineeships, Cancer Institute | 2,444 | 2,445 |
| Training Grants, Heart Institute | 2,390 | 2,392 |
| Training Grants, Institute of Allergy and Infectious Diseases | 734 | 1,849 |
| Training Grants and Fellowships, Institute of Mental Health | 11,338 | 13,035 |
| Research Fellowships, NIH | 3,120 | [4] 4,391 |
| Traineeships for Public Health Personnel and Nurses | 2,561 | 3,074 |
| Chaplain Training at St. Elizabeths Hospital | [5] 3 | [5] 6 |
| Nursing Education at St. Elizabeths Hospital | (6) | (6) |
| Resident and Intern Training in the Clinical Sciences at St. Elizabeths Hospital | (6) | (6) |
| Training State Personnel in Maternal and Child Health Programs[7] | 1,532 | 1,586 |
| Training State Personnel in Child Welfare Agencies | 1,133 | (6) |
| Training State Personnel in Public Assistance Agencies | [8] 669 | (6) |
| NDEA Fellowships: Institutional Grants | (9) | 2,350 |
| NDEA Fellowships | (9) | 2,320 |
| Counseling and Guidance Institutes, NDEA | (9) | 3,388 |
| Research and Studies in Language Development, NDEA | (9) | 974 |
| Language Development Institutes, NDEA | (9) | 2,566 |
| Rehabilitation Training Grants, OVR | 2,133 | 2,800 |
| **Department of Commerce** | **92** | **112** |
| Training Foreign Census Technicians | 82 | 89 |
| Research and Training in the National Bureau of Standards | 10 | 24 |
| **Department of Defense** | **1,712** | **1,755** |
| Professional Training for Army Medical Service Officers | 68 | 71 |
| Education at Civilian Institutions for Army Personnel | 594 | 472 |
| Education at Civilian Institutions for Navy Personnel | 377 | 375 |
| Medical Training for Navy Personnel in Civilian Medical Schools | $35 | $36 |
| Professional Training for Air Force Medical Officers | 72 | 85 |
| U.S. Air Force Institute of Technology—Nonresident Training | 565 | 716 |
| **Department of State**[10] | **12,551** | **13,852** |
| Study Grants, Educational Exchange Program | 12,551 | 13,852 |
| **Department of the Treasury** | **56** | **95** |
| U.S. Coast Guard Officer Specialized Training | 56 | 95 |
| **Atomic Energy Commission** | **44,956** | **57,144** |
| School Equipment and Teacher Training | 336 | 759 |
| Contract Research | 39,628 | 50,485 |
| Fellowships in Biology and Medicine | 400 | 530 |
| Special Schools and Courses | 3,728 | 3,595 |
| Assistance to Schools in Reactor Technology | 438 | 1,225 |
| Fellowships in Nuclear Science and Engineering | 426 | 550 |
| **Federal Deposit Insurance Corporation** | **14** | **16** |
| Employee Training in Bank Examining and Auditing | 14 | 16 |
| **National Aeronautics and Space Administration** | **46** | **115** |
| Ames Research Center Training Program | 13 | 33 |
| Flight Research Center Training Program | 0 | 2 |
| Langley Research Center Training Program | 14 | 33 |
| Lewis Research Center Training Program | 18 | 40 |
| Space Flight Center Training Program | 0 | 9 |
| **National Science Foundation** | **44,715** | **46,440** |
| Academic Year Institutes for Teachers | 8,787 | 9,211 |
| Graduate Fellowships | 7,385 | 8,086 |
| Inservice Institutes for Teachers | 1,942 | 2,248 |
| Research Participation Grants | 797 | 1,232 |
| Science Faculty Fellowships | 1,202 | 1,706 |
| Secondary School Teacher Fellowships | 1,475 | 1,300 |
| Special Field Institutes Grants | 45 | 84 |
| Summer Conferences for Teachers | 260 | 276 |
| Summer Institutes for Teachers | 22,348 | 21,759 |
| Supplementary Training for Science Teachers | 473 | 538 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 10.
[3] New program in 1960.
[4] Includes awards for first 10 months of fiscal year 1960.
[5] Data incomplete.
[6] Data not available.
[7] Postdoctoral level included.
[8] Includes some State funds.
[9] Program in operation but actual expenditures began in 1960.
[10] Office of Education estimate based on data provided by agency concerned.

NOTE: Because of rounding, detail may not add to totals.

**Table 54.—Federal Funds for Education at the Graduate Level, by Type of Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$137,961** | **$173,570** |
| Research | 39,715 | 50,610 |
| Fellowships | 26,601 | 34,312 |
| Traineeships | 4,158 | 9,152 |
| Training grants | 60,098 | 73,397 |
| Facilities | 2,372 | 2,500 |
| Military personnel | 1,767 | 1,850 |
| Federal employees | 70 | 155 |
| OTHER: | | |
| AEC special schools and courses | 221 | 255 |
| Instruction | 1,157 | 1,334 |
| Training State and local officials | 1,802 | 6 |

NOTE: Because of rounding, detail may not add to totals.

ship programs; NSF graduate, science faculty, and secondary school teacher fellowships; and study grants under the Educational Exchange Program of the Department of State were also included. These study grants account for a major part of the amount for fellowship programs.

*Traineeships.*—Stipends to individual participants in the institutes for counseling and guidance and for language development under NDEA are classified as funds for traineeships. The Department of Health, Education, and Welfare also reported chaplain training at St. Elizabeths Hospital, training of medical record librarians in Public Health Service hospitals, training of public health personnel and nurses, and training at the Robert A. Taft Sanitary Engineering Center. The Department of Commerce reported research and training at the National Bureau of Standards and the training of foreign census technicians. Also included as traineeships are payments to participants in special schools and courses conducted by AEC.

*Training grants.*—The largest amount for graduate-level programs was reported for training grants. Over 43 percent of the total at the graduate level in fiscal year 1959 and 42 percent in 1960 was for training grant programs. Included as training grants and contracts are grants to institutions for counseling and guidance institutes, language development institutes, support of graduate training under the NDEA fellowship program, and NDEA grants for research and studies in language development. Other training grants provided by the Department of Health, Education, and Welfare are the experimental training grants to medical schools of NIH, regular and research training grants of NIH, rehabilitation training grants of OVR, grants to States for training personnel in child welfare agencies, maternal and child health programs, and public assistance agencies. NSF contributed significantly to support of graduate-level education in its grants for teacher-training institutes.

*Facilities.*—AEC reported assistance to schools by providing equipment for training in reactor technology.

*Military personnel.*—Education at civilian institutions constitutes about half of the amount for military training. Nonresident training through the U.S. Air Force Institute of Technology, specialized training of U.S. Coast Guard officers, and costs of training other military personnel in educational institutions are included in this category.

*Federal employees.*—In addition to the employee outservice training reported by NASA, this category includes the training program in bank examining and auditing of the Federal Deposit Insurance Corporation.

*Other.*—Other programs reported are AEC special schools and courses, instruction at Howard University and Gallaudet College, and training of State and local officials in food and drug inspection techniques.

## Undergraduate Level

Federal funds at the undergraduate level include those for educational programs and individuals in educational programs regarded as at college level and below the bachelor's-degree level.

Although eight Federal agencies reported funds for educational activities at the undergraduate level, Veterans' Administration payments for veterans' education and training accounted for 85 percent of the total in fiscal 1959 and 76 percent in fiscal 1960. Some graduate level activities are included in the data on veterans' education because they could not be reported separately. The decrease in total amounts reported at this level from 1959 to 1960 reflects the decreasing costs of veterans' education programs.

Amounts at the undergraduate level are listed by field of study, agency, and program in tables A-9 through A-18 (p. 68-77). Amounts are reported by agency and program in table 55.

## Table 55.—Federal Funds for Education at the Undergraduate Level, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total**[2] | **$427,230** | **$325,220** |
| **Department of Health, Education, and Welfare** | **10,042** | **19,842** |
| Instruction in Land-Grant Colleges and Universities[3] | 5,052 | 5,052 |
| Vocational Education | 1,570 | 1,665 |
| Gallaudet College | 676 | 671 |
| Howard University: Curriculum[3] | 1,511 | 1,540 |
| Education in Public Health Service Hospitals | 206 | 243 |
| Training Grants and Traineeships, Cancer Institute | 133 | 126 |
| Training Grants and Fellowships, Institute of Mental Health | 895 | 925 |
| Nursing Education at St. Elizabeths Hospital | (4) | (4) |
| Occupational Therapy Intern Training at St. Elizabeths Hospital | (4) | (4) |
| Student Loan Fund, NDEA[3] | (5) | 9,619 |
| **Department of Commerce** | **3,267** | **4,021** |
| Merchant Marine Schools | 3,266 | 4,016 |
| Research and Training in the National Bureau of Standards | 1 | 5 |
| **Department of Defense** | **43,579** | **44,303** |
| Professional Training for Army Medical Service Officers | 11 | 16 |
| Education at Civilian Institutions for Army Personnel | 116 | 395 |
| Education at Civilian Institutions for Navy Personnel | 4,259 | 4,633 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 151 | 157 |
| U.S. Air Force Academy | 15,770 | 15,882 |
| U.S. Air Force Institute of Technology—Nonresident Training | 539 | 716 |
| U.S. Military Academy | $12,401 | $12,112 |
| U.S. Naval Academy | 10,332 | 10,392 |
| **Department of the Treasury** | **4,068** | **4,150** |
| U.S. Coast Guard Academy | 4,068 | 4,150 |
| **Atomic Energy Commission** | **1,031** | **1,195** |
| School Equipment and Teacher Training | 1,031 | 1,160 |
| Special Schools and Courses | 0 | 35 |
| **National Aeronautics and Space Administration** | **0** | **1** |
| Space Flight Center Training Program | 0 | 1 |
| **National Science Foundation** | **1,975** | **3,217** |
| Research Participation Grants | 1,675 | 2,902 |
| Special Field Institutes Grants | 0 | 4 |
| Special Projects in Science Education | 301 | 311 |
| **Veterans' Administration**[6] | **363,268** | **248,492** |
| Readjustment Training Program[3] | [6]347,427 | 232,598 |
| Vocational Rehabilitation Program[3] | 8,875 | 6,389 |
| War Orphans Educational Assistance[3] | 6,966 | 9,505 |

[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 6.

[3] Graduate level included.

[4] Data not available.

[5] Program in operation but actual expenditures began in 1960.

[6] Office of Education estimate based on data provided by agency concerned.

NOTE: Because of rounding, detail may not add to totals.

Federal funds for educational activities at the undergraduate level are reported by type of program in table 56. Payments to veterans for costs of education and training and costs of training military personnel in educational institutions account for most of the amounts reported at this level. Activities included in each type of program are identified in the paragraphs following the table.

## Table 56.—Federal Funds for Education at the Undergraduate Level, by Type of Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$427,230** | **$325,220** |
| Traineeships | 133 | 126 |
| Training grants | 4,140 | 5,496 |
| Facilities | 1,027 | 1,150 |
| Military personnel | 43,892 | 44,505 |
| Federal employees | 1 | 5 |
| OTHER: | | |
| AEC special schools and courses | 4 | 45 |
| Instruction | 7,239 | 7,263 |
| Merchant Marine Schools | 3,266 | 4,016 |
| Navy "regular" ROTC | 3,756 | 3,948 |
| Public Health Service hospitals | 206 | 243 |
| Special projects in science education, NSF | 301 | 311 |
| Student loans, NDEA | 0 | 9,619 |
| Veterans' education | 363,268 | 248,492 |

NOTE: Because of rounding, detail may not add to totals.

*Traineeships.*—Traineeships at the undergraduate level were reported by the National Cancer Institute and the National Bureau of Standards.

*Training grants.*—National Institute of Mental Health training grants and NSF research participation and special field institute grants are included in this category.

*Facilities.*—AEC reported funds for undergraduate education for instructional equipment.

*Military personnel.*—The amount reported for military personnel was over 10 percent of the total at the undergraduate level in fiscal year 1959, increasing to over 13 percent in 1960. The military and Coast Guard academies and training of military personnel at civilian educational institutions accounts for these relatively high percentages.

*Federal employees.*—Employee outservice training was reported by NASA.

*Other.*—Other programs account for over 88 percent of the total for undergraduate education in fiscal 1959 and 84 percent in fiscal 1960. These large percentages are due primarily to the costs of veterans' education. The amount reported by the Veterans Administration at the undergraduate level includes funds for graduate-level students, since that agency was unable to report graduate and undergraduate funds separately and since most of the amount involved was for undergraduate students. Amounts for instruction includes grants for instruction at land-grant colleges and for undergraduate instruction at Howard University and Gallaudet College. Undergraduate nursing instruction at Freedman's Hospital accounts for the amount reported at Public Health Service hospitals.

## Adult Education

Federal funds for activities at the adult-education level include those for programs for individuals above high school age engaged in nonacademic or technical training. Amounts at this level are reported by field of study, agency, and program in tables A–9 through A–18 (p. 68–77). Amounts are reported by agency and program in table 57. Most of the Federal funds for adult-education programs are for veterans' education, grants in support of cooperative agricultural extension services, and vocational education.

## Elementary-Secondary Level

Activities reported at the elementary-secondary level include those providing funds for educational programs, facilities, or services for elementary or secondary school students. Funds for educational activities at this level are listed by field of study, agency, and program in tables A–9 through A–18 (p. 68–77).

The National Science Foundation reported training grants to provide summer science training for secondary school students. Programs providing educational facilities include assistance for school construction in Alaska, the District of Columbia, and the Panama Canal Zone. Other programs, accounting for most of the amount reported, include the school lunch program, support of schools in federally affected areas, support of schools for Indians, support of schools by distribution of public land and national forest revenues to the States for education and other uses as determined by each State, and other programs listed by agency in table 58 below.

## Other Levels

Federal funds not classified by specific levels include those for educational activities and for individuals engaged in educational activities at two or more academic levels which cannot be reported separately, and activities which are not related to specific or combined academic levels. The large amounts reported here are accounted for largely by research grants and contracts, college housing loans, research facilities grants, surplus property transferred to educational institutions, and other

### Table 57.—Federal Funds for Adult Education, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total**[2] | **$309,944** | **$234,748** |
| **Department of Health, Education, and Welfare** | **12,889** | **16,988** |
| Civil Defense Adult Education | (3) | 557 |
| Vocational Education | 10,847 | 14,356 |
| Training for State Public Health Personnel at the Communicable Disease Center | 769 | 643 |
| Grants to States for Public Health Personnel | 1,272 | 1,423 |
| Training State Personnel in Public Assistance Agencies | ---------- | 10 |
| **Department of Agriculture** | **53,715** | **53,715** |
| Cooperative Agricultural Extension Program | 53,715 | 53,715 |
| **Department of the Interior** | **3,810** | **5,015** |
| Public Schools for Indians | 2,610 | 3,765 |
| Safety Training for Mine Workmen | 1,200 | 1,250 |
| **Department of Justice** | **1,416** | **1,604** |
| Education and Vocational Training in Penal Institutions | 1,182 | 1,373 |
| FBI National Academy | 9 | 6 |
| Police Training Schools | 225 | 225 |
| **Department of Labor** | **$4,009** | **$4,047** |
| Promotion of Apprenticeship and Training | 4,009 | 4,047 |
| **Canal Zone** | **29** | **30** |
| Apprentice School, Panama Canal Company | 29 | 30 |
| **Federal Aviation Agency** | **1,008** | **1,069** |
| Technical Training in Aviation for Foreign Nationals | 994 | 1,034 |
| Outservice Training of Employees | 14 | 34 |
| **Small Business Administration** | (4) | (4) |
| Management Training Courses | (4) | (4) |
| **Veterans' Administration**[5] | **233,068** | **152,279** |
| Readjustment Training Program | 218,942 | 138,806 |
| Vocational Rehabilitation Program | 13,432 | 11,521 |
| War Orphans Educational Assistance | 694 | 1,952 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 5.
[3] New program in 1960.
[4] Data not available.
[5] Office [illegible] Education estimate based on data provided by agency concerned.

NOTE: Because of rounding, detail may not add to totals.

### Table 58.—Federal Funds for Education at the Elementary-Secondary Level, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960[1] |
|---|---|---|
| **Total**[2] | **$760,719** | **$839,184** |
| **Department of Health, Education, and Welfare** | **307,794** | **339,079** |
| School Assistance in Federally Affected Areas | 215,066 | 233,500 |
| Improvement in Science, Mathematics and Foreign Language Instruction | 56,000 | 60,000 |
| Secondary School Guidance, Counseling and Testing Services | 7,400 | 15,000 |
| Vocational Education | 28,982 | 30,205 |
| Gallaudet College | 47 | 56 |
| Education in Public Health Service Hospitals | 16 | 17 |
| Training of Indian Health Personnel | 283 | 301 |
| **Department of Agriculture** | **298,825** | **335,754** |
| School Lunch Program | 275,945 | 305,512 |
| School Support from National Forest Revenue[3] | 22,322 | 29,782 |
| School Support from Submarginal Land Revenue[3] | 558 | 460 |
| **Department of Defense** | **30,237** | **34,251** |
| Education of Dependents of Military Personnel | 30,134 | 34,150 |
| Public Schools in Northern Mariana—Saipan District | 103 | 101 |
| **Department of the Interior** | **97,739** | **100,879** |
| Public Schools in the Pribilof Islands | 51 | 51 |
| Public Schools for Indians | 44,711 | 46,832 |
| School Support from Public Land Revenue[3] | 51,276 | 53,250 |
| Education of Dependents of National Park Service Employees | 38 | 59 |
| Public Schools in the Trust Territory of the Pacific Islands[4] | 399 | 419 |
| Public Schools in American Samoa[4] | 218 | 268 |
| Alaska School Construction | 1,047 | --------- |
| **Department of Labor** | **$3,765** | **$4,815** |
| Testing, Counseling, and Placement Interviews for High School Seniors | 3,765 | 4,815 |
| **Department of the Treasury** | **37** | **37** |
| Education of Dependents of U.S. Coast Guard Personnel | 37 | 37 |
| **Atomic Energy Commission** | **4,958** | **4,347** |
| Public Schools at AEC Facilities | 4,958 | 4,347 |
| **Canal Zone** | **4,990** | **7,825** |
| Public Schools | 4,990 | 7,825 |
| **District of Columbia** | **7,742** | **7,734** |
| Public Schools | 7,742 | 7,734 |
| Education in Public Welfare Institutions | (5) | (5) |
| **National Aeronautics and Space Administration** | **0** | (6) |
| Space Flight Center Training Program | 0 | (6) |
| **National Science Foundation** | **4,632** | **4,463** |
| Special Projects in Science Education | 3,016 | 2,527 |
| Summer Science Training for Secondary School Students | 1,616 | 1,936 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 4.
[3] Payments to be used for roads or schools as determined by each State.
[4] Office of Education estimate based on data provided by agency concerned.
[5] Data not available.
[6] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

programs which are listed by agency in table 59 below. Data on funds at "other" levels are provided by field of study in tables A-9 through A-18 (p. 68-77).

Federal funds for educational activities at "other" levels is reported by type of program in table 60. The large amounts for research include research grant and contract funds of most agencies other than AEC, which classified research activities at the graduate level. Acquisition costs of surplus property transferred to educational agencies account for a major part of the amounts reported for facilities. Activities included in these and other types of programs are identified in the paragraphs following the table.

*Research.*—Most research contract and grant programs were reported at this level. Amounts for research account for about 43 percent of the total in this level category in fiscal year 1959 and for over 34 percent in 1960.[1] Cooperative research in education; research in the utilization of new educational media and in language development under the National Defense Education Act research and demonstration project grants of the Office of Vocational Rehabilitation; support of research in State agricultural experiment stations; and research grants and contracts of the Department of Defense, NASA, NSF, and TVA account for the large amounts reported.

*Traineeships.*—U.S. Public Health Service traineeships for health personnel and nurses, training for foreign census technicians and foreign visitors in labor and allied fields, and training in AEC-sponsored special schools and courses are included here.

*Training grants.*—Training grants of the Office of Vocational Rehabilitation, the National Institute of Mental Health, and the Federal Council on Medical Education for National Defense are included in this classification.

*Facilities.*—Federal funds for educational facilities account for almost 44 percent of the total classified under "other" levels for fiscal 1959, increasing to 54 percent in fiscal 1960. The largest amount is for the acquisition cost of surplus property transferred to educational agencies. Other programs reported include construc-

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[1] Research funds classified by specific level are identified earlier in this section. It has been noted in section 1 that only about half of total Federal funds for research in educational institutions and research centers are included in this report (see p. 4).

### Table 59.—Federal Funds for Education at Other Levels, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 [1] |
|---|---|---|
| **Total [2]** | **$703,622** | **$1,067,102** |
| **Department of Health, Education, and Welfare** | **326,571** | **371,359** |
| Administration of the Office of Education | 8,229 | 10,327 |
| Cooperative Research in Education | 2,681 | 3,200 |
| Improvement of State Educational Statistical Services | 238 | 1,129 |
| Rural Library Services | 5,218 | 7,500 |
| Promotion of New Educational Media | (3) | 3,915 |
| Improvement in Science, Mathematics and Foreign Language Instruction | 1,350 | 4,000 |
| American Printing House for the Blind | 410 | 410 |
| Gallaudet College | 123 | 325 |
| Howard University: Construction | 286 | 881 |
| Howard University: Operation | 1,475 | 1,476 |
| Howard University: Staff Expenses | 209 | 209 |
| Rehabilitation Research and Demonstration Project Grants, OVR | 4,600 | 6,500 |
| Training Grants and Fellowships, Institute of Mental Health | 828 | 542 |
| Traineeships for Public Health Personnel and Nurses | 5,935 | 5,733 |
| Training in Psychotherapy at St. Elizabeths Hospital | (4) | (4) |
| Volunteer Training at St. Elizabeths Hospital | (4) | (4) |
| Surplus Property, Original Cost | 292,366 | 319,500 |
| Research and Studies in Language Development, NDEA | (3) | 2,416 |
| Rehabilitation Training Grants, OVR | 2,624 | 3,297 |
| **Department of Agriculture** | **30,846** | **30,846** |
| State Agricultural Experiment Stations | 30,846 | 30,846 |
| **Department of Commerce** | **41** | **72** |
| Training Foreign Meteorologists | 41 | 72 |
| **Department of Defense** | **225,302** | **266,632** |
| Professional Training for Army Medical Service Officers | 89 | 121 |
| Cooperative Work-Study Program for Navy Employees | 429 | 383 |
| Education of Civilian Employees | 2,645 | 3,938 |
| Off-Duty Education of Active Military Personnel | 12,081 | 12,199 |
| Federal Council on Medical Education for National Defense Program | 405 | 473 |
| Research and Development Contracts | 207,253 | 246,176 |
| U.S. Air Force Institute of Technology—Nonresident Training | 2,400 | 3,344 |
| **Department of Labor** | **3,167** | **3,400** |
| Training in Labor and Allied Fields for Foreign Visitors | 3,167 | 3,400 |
| **Department of State** | **$40,794** | **$54,977** |
| Grants for Advisory Services and Technical Training, Educational Exchange Program [5] | 2,241 | 2,474 |
| Grants for Observation and Consultation, Educational Exchange Program [5] | 3,180 | 3,509 |
| Teaching and Teacher Training Grants, Educational Exchange Program [5] | 4,152 | 4,582 |
| Cooperative Educational Activities in Other Countries | 31,221 | 44,412 |
| **Department of the Treasury** | **1,051** | **1,023** |
| Training Enforcement Personnel of the Internal Revenue Service | 1,051 | 1,023 |
| **Atomic Energy Commission** | **3** | **12** |
| Special Schools and Courses | 3 | 12 |
| **Housing and Home Finance Agency** | **0** | **250,000** |
| College Housing Loans [6] | 0 | 250,000 |
| **Library of Congress** | **1,368** | **1,619** |
| Reading Material for the Blind | 1,368 | 1,619 |
| **National Aeronautics and Space Administration** | **4,977** | **8,423** |
| Flight Research Center Training Program | 1 | (7) |
| Lewis Research Center Training Program | 0 | 3 |
| Research Grants and Contracts | 4,976 | 8,420 |
| **National Science Foundation** | **67,169** | **77,241** |
| Basic Research Grants | 45,074 | 58,400 |
| Course Content Improvement Grants | 6,030 | 6,000 |
| Research Facilities Grants | 15,580 | 11,644 |
| Special Projects in Science Education | 484 | 1,197 |
| **Office of Civil and Defense Mobilization** | **1,741** | **891** |
| Operation of Civil Defense Schools | 529 | 575 |
| Support of State Training Programs in Civil Defense | 1,212 | 316 |
| **Tennessee Valley Authority** | **593** | **606** |
| Cooperative Research, Test, and Demonstration Grants | 593 | 606 |

[1] Estimated by respondents.
[2] Includes Office of Education estimates for some programs. See footnote 5.
[3] Program in operation but actual expenditures began in 1960.
[4] Data not available.
[5] Office of Education estimate based on data provided by agency concerned.
[6] Reported on the basis of funds authorized. Actual loans approved were $155 million for 1959 and $172 million for 1960.
[7] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

### Table 60.—Federal Funds for Education at Other Levels, by Type of Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$703,622** | **$1,067,102** |
| Research | 302,054 | 366,479 |
| Traineeships | 5,975 | 5,806 |
| Training grants | 3,857 | 4,312 |
| Facilities [1] | 308,355 | 582,350 |
| Teaching grants | 4,152 | 4,582 |
| Military personnel | 14,570 | 15,664 |
| Federal employees | 4,126 | 5,346 |
| OTHER: | | |
| Administration of the Office of Education | 8,229 | 10,327 |
| Civil defense education | 1,741 | 891 |
| Educational exchange activities | 5,421 | 5,983 |
| Instruction | 1,684 | 1,685 |
| International cooperative educational activities | 31,221 | 44,412 |
| NDEA activities | 1,588 | 5,129 |
| Rural library services | 5,218 | 7,500 |
| Miscellaneous | 5,433 | 6,639 |

[1] Includes college housing loans for 1960 only. See table 59.

NOTE: Because of rounding, detail may not add to totals.

tion at Howard University and Gallaudet College, college housing loans,[2] and research facilities grants of NSF.

*Teaching grants.*—Grants for teaching and teacher training under the Educational Exchange Program were reported in this area.

*Military personnel.*—Off-duty education programs, training of Army medical service officers, and nonresident training through the U.S. Air Force Institute of Technology were reported for military personnel.

*Federal employees.*—Outservice training of civilian employees of the Department of Defense, including the work-study program for Navy employees, training of enforcement personnel of the Internal Revenue Service, and outservice training of NASA employees are included in this category.

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[2] See table 59, footnote 6.

*Other.*—Civil defense education includes both the operation of civil defense schools and grants to States for civil defense training programs. Grants to States for improvement of educational statistical services and for the administration of programs for the improvement of science, mathematics, and foreign language instruction are reported here as NDEA activities. Miscellaneous programs include support for the operation and staff expenses of Howard University, the program of the American Printing House for the Blind, the program of the Library of Congress for provision of reading material for the blind, and NSF special projects in science education.

## Section 4

# Federal Funds for Education and Training in the Sciences

THE PRECEDING SECTIONS of this study presented data on Federal funds for education by fields of study and academic levels. The analysis of Federal funds for education and training in the sciences in this section is based on the data presented by field of study in section 2. Funds for research and research facilities included in the previous sections, however, are excluded in this section. Although funds for research and research facilities have a major impact on education and training in the sciences, accurate measurement of their contributions to education and training, as opposed, for example, to payments for defense and welfare services, is not possible on the basis of data available for this report. Because of the lack of data that accurately indicate the impact of research funds on education and training, this analysis excludes research funds.

### Fields of Study

Federal funds for education were discussed in detail by field of study in section 2. Exclusive of programs providing funds for research and research facilities, data on specific fields of science and data selected from other fields and general education which pertain to education and training in the sciences are included in this section. In addition, programs classified in the field of education or in general education which provide funds for education and training in the sciences are included. Table 61 presents data on this basis.

The data for specific fields of science are taken from the tables in section 2. In addition, data on funds for education and training in the sciences, and not reported in specific fields of science, are included as follows: "Multiple science disciplines" include amounts for programs related to more than one field of science which were not broken down into individual fields by the responding agencies; "general science" includes teacher training, fellowship, and secondary school student training programs in this area; and "science education" includes programs related to science education which were reported in the field of education. Teacher training and other programs providing funds for education and training in the sciences which could be classified in individual science fields, combined fields (multiple science disciplines), general science, or which were reported in the general education category, are included in those categories.

**Table 61.—Federal Funds for Education and Training in the Sciences, Excluding Research and Research Facilities, by Field of Study: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Field of study [1] | 1959 | 1960 |
|---|---|---|
| **Total** | **$465,618** | **$457,653** |
| Agricultural sciences | 103,067 | 88,949 |
| Biological sciences | 37,206 | 48,397 |
| Clinical sciences | 58,927 | 60,517 |
| Engineering | 68,925 | 51,622 |
| Physical sciences | 46,378 | 49,946 |
| Social sciences | 25,363 | 25,703 |
| OTHER [2] | (125,752) | (132,519) |
| Multiple science disciplines | 80,099 | 87,637 |
| General science | 1,990 | 1,363 |
| Science education [3] | 266 | 371 |
| General education [4] | 43,399 | 43,148 |

[1] Funds for the specific fields of the agricultural, biological, clinical, engineering, physical, and social sciences are shown in table 3, p. 7. Amounts reported in table 61 are for education and training exclusive of funds for research and research facilities. Differences in amounts shown in this table with those in table 3 for a particular field equal amounts for research and research facilities in that field. Detailed data for specific science fields are presented in section 2. See tables 4, 9, 14, 24, 29, and 34 above.

[2] Includes amounts reported in table 3 as "combined fields", "the field of education", or "general education" that can be identified as funds for education and training in the sciences. See table 62 below for programs included from these categories.

[3] Includes only the amounts for science education that are included in the category "field of education" in section 2. Some training of advanced research and other professional personnel in methods of science education are included. Teacher training programs related to specific science fields, multiple science disciplines, or general science are included elsewhere.

[4] Includes total operation and maintenance costs of the military and Coast Guard academies. See table 62.

NOTE: Because of rounding, detail may not add to totals.

Programs selected from those presented in table 3 of section 2 in the field of education, other fields, and as general education (and included in the "other" category in table 61) are identified by agency in table 62.

### Academic Levels

Federal funds for education and training in the sciences are reported by academic level in table 63.

**Table 62.—Federal Funds for Education and Training in the Sciences Reported in the Field of Education, Other Fields, or as General Education, Excluding Research and Research Facilities, by Agency and Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Agency and program | 1959 | 1960 |
|---|---|---|
| **Total** | **$125,752** | **$132,519** |
| **Multiple Science Disciplines** | **80,099** | **87,637** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | | |
| Howard University: Medical School | 107 | 201 |
| Howard University: School of Social Work | 65 | 66 |
| Grants and Loans for Improvement of Instruction in Science and Mathematics, NDEA | 48,002 | 53,568 |
| Traineeships for Public Health Service Personnel | 2,561 | 3,074 |
| Grants to States for Training Public Health Personnel | 1,272 | 1,423 |
| Training at the Robert A. Taft Sanitary Engineering Center | 318 | 476 |
| Training Grants, NIH | 218 | 120 |
| Research Fellowships, NIH | 251 | 2,861 |
| Rehabilitation Research Fellowships, OVR | 42 | 103 |
| DEPARTMENT OF DEFENSE | | |
| U.S. Air Force Institute of Technology—Nonresident Training | 394 | 595 |
| Professional Training for Army Medical Service Officers | 92 | 128 |
| Cooperative Work-Study Program for Navy Employees | 429 | 383 |
| Education at Civilian Institutions for Navy Personnel | 293 | 520 |
| FEDERAL AVIATION AGENCY | | |
| Outservice Training of Employees | 14 | 34 |
| Technical Training in Aviation for Foreign Nationals | 994 | 1,034 |
| NATIONAL SCIENCE FOUNDATION | | |
| Academic Year Institutes for Teachers | 6,914 | 6,134 |
| Inservice Institutes for Teachers | 806 | 797 |
| Research Participation Grants | 0 | 675 |
| Special Projects in Science Education | 3,800 | 4,035 |
| Summer Institutes for Teachers | 13,527 | 11,410 |
| **General Science** | **1,990** | **1,363** |
| NATIONAL SCIENCE FOUNDATION | | |
| Research Participation Grants | 919 | 210 |
| Science Faculty Fellowships | 8 | 0 |
| Secondary School Teacher Fellowships | 129 | 120 |
| Summer Institutes for Teachers | 516 | 585 |
| Summer Science Training for Secondary School Students | 305 | 421 |
| Supplementary Training for Science Teachers | 113 | 27 |
| **Science Education** | **266** | **371** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | | |
| Training Grants, NIH | 210 | 301 |
| Research Fellowships, NIH | 42 | 60 |
| DEPARTMENT OF DEFENSE | | |
| Professional Training for AMEDS | 14 | 10 |
| **General Education** | **43,399** | **43,148** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | | |
| Training Grants, NIH | 828 | 542 |
| Research Fellowships, NIH | 0 | 70 |
| DEPARTMENT OF DEFENSE | | |
| Military and Coast Guard Academies | 42,571 | 42,536 |

NOTE: Because of rounding, detail may not add to totals.

**Table 63.—Federal Funds for Education and Training in the Sciences, Excluding Research and Research Facilities, by Academic Level: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Academic level | 1959 | 1960 |
|---|---|---|
| **Total** | **$465,618** | **$457,653** |
| Postdoctoral | 38,246 | 50,303 |
| Graduate | 90,972 | 107,760 |
| Undergraduate | 168,794 | 134,861 |
| Adult education | 89,274 | 79,156 |
| Elementary-secondary | 65,518 | 71,631 |
| Undistributed by specific level | | |
| Training grants and traineeships | 7,436 | 7,742 |
| Other | 5,376 | 6,202 |

NOTE: Because of rounding, detail may not add to totals.

The programs in each classification are described in the paragraphs following the table.

Section 2 has provided details on programs in specific fields of science. Programs selected from the field of education, general education, and other fields of study and included in the tabulations for table 63 include, at the postdoctoral level, regular and postdoctoral research fellowships of the National Institutes of Health, science faculty fellowships of the National Science Foundation, and training grants of the National Heart Institute. Programs at the graduate level include regular research fellowships of NIH, research fellowships of the Office of Vocational Rehabilitation, and NSF secondary school teacher and science faculty fellowships; U.S. Public Health Service traineeships for public health personnel for specialized training in public health and advanced environmental health methodology and practices; NSF training grants for research participation for teacher training, supplementary training for teachers, and teacher-training institutes; training in civilian educational institutions for Army medical personnel and nonresident training through the U.S. Air Force Institute of Technology; and support of the College of Medicine and the School of Social Work at Howard University.

Undergraduate level programs include NSF research participation grants; training of Navy personnel in the engineering and physical sciences, training of Army medical personnel, nonresident training through the U.S. Air Force Institute of Technology in the biological and physical sciences, and the military and Coast Guard academies; and the visiting scientists program of the National Science Foundation. The decreases in funds for the undergraduate and adult education levels are accounted for by the decreasing costs of veterans' education programs. Funds for the graduate level are not reported separately. Therefore, it is not possible to show the effect of the increase or decrease in funds for veterans' education on the total funds at the graduate level.

Programs at the adult-education level include training in public health practices for State and local health personnel by the Department of Health, Education, and Welfare; and outservice training for employees and aviation training for foreign nationals of the Federal Aviation Agency.

Programs at the elementary-secondary level include the NSF summer science training program for secondary school students, grants for support of science clubs, traveling science demonstration lectures, traveling science libraries, visiting scientists for secondary schools, and special projects in science education; and grants and loans under the National Defense Education Act for the improvement of instruction in science and mathematics. Programs not elsewhere classified include rehabilitation training grants, support of the Howard University College of Medicine, and NIH special grants of the Department of Health, Education, and Welfare; NSF special project grants; and training of Army medical personnel and the cooperative work-study program for Navy civilian employees of the Department of Defense.

## Types of Programs

Federal funds for education and training in the sciences are classified by type of program in table 64. Programs in each field of study were discussed in detail in section 2. The programs discussed there in the agricultural, biological, clinical, engineering, physical, and social sciences, exclusive of research and research facilities, are included in the data on education and training in the sciences. Programs selected from the field of education, general education, or other fields of study and included in this data are discussed by type of program in the paragraphs following table 64.

**Table 64.—Federal Funds for Education and Training in the Sciences, Excluding Research and Research Facilities, by Type of Program: Fiscal Years 1959 and 1960**

[Thousands of dollars]

| Type of program | 1959 | 1960 |
|---|---|---|
| **Total** | **$465,618** | **$457,653** |
| Fellowships | 31,741 | 39,215 |
| Traineeships | 12,749 | 14,351 |
| Training grants | 92,430 | 113,253 |
| Facilities | 51,401 | 57,218 |
| Teaching grants | 1,820 | 2,008 |
| Military personnel | 45,023 | 45,706 |
| Federal employees | 507 | 577 |
| Not elsewhere classified | | |
| Cooperative Agricultural Extension Program | 53,715 | 53,715 |
| Instruction | 6,220 | 6,281 |
| International education activities | 3,719 | 4,043 |
| Veterans' education | 140,626 | 91,510 |
| Vocational education | 15,744 | 18,705 |
| Other | 9,924 | 11,073 |

NOTE: Because of rounding, detail may not add to totals.

Programs providing funds for science education were selected from those reported in the field of education, general education, and other fields of study and added to those in the specific fields of science for analysis in this section. The programs selected from these categories are identified by type of program below (the specific field category from which a program was selected is indicated in parentheses following the program identification):

*Fellowships.*—Research fellowships of the National Institutes of Health (Education, General Education, Other Fields); science faculty and secondary school teacher fellowships of the National Science Foundation (Other Fields).

*Traineeships.*—Public Health Service traineeships for public health personnel and nurses (Other Fields).

*Training grants.*—Training grants of the National Institutes of Health (Education, General Education, Other Fields); NSF grants in general science and multiple science fields for research participation projects (Other Fields); NSF summer institutes for teachers, summer science training for secondary students, and supplementary training for science teachers in general science (Other Fields); OVR rehabilitation training grants in multiple science fields (Other Fields); NSF academic year institutes in multiple science fields for teachers (Other Fields).

*Facilities.*—Grants for improvement of instruction in science and mathematics under the National Defense Education Act (Other Fields).

*Military personnel.*—Professional training for Army medical officers (Education, Other Fields); military and Coast Guard academies (General Education); Air Force Institute of Technology nonresident training (Other Fields); Navy personnel in educational institutions (Other Fields).

*Federal employees.*—Cooperative work-study program for Navy employees and Federal Aviation Agency outservice training of employees (Other Fields).

*Other.*—Grants to States for training public health personnel (Other Fields); Federal Aviation Agency technical aviation training for foreign nationals (Other Fields); support of the Howard University College of Medicine and School of Social Work (Other Fields); support of vocational education in the States (Other Fields).

## Recipients

The kind and number of individual participants in federally supported educational activities in the sciences are reported in table 65. The data in this table are based on those presented in section 2 (exclusive of research and research facilities) for the agricultural, biological, clinical, engineering, physical, and social sciences and on special tabulations for the education, general education, and other fields categories which excluded activities not concerned with education in the sciences.

Data on the number of individual recipients in selected federally supported educational activities in the sciences are presented in table 66. This table is concerned only with fellowship, traineeship, training grant, and teaching grant programs; and the recipients in these programs do not include all those reported in table 65. The number of recipients reported in training grant programs does not include all persons receiving support from training-grant funds, since the responding Federal agencies could not report these data for all such programs.

**Table 65.—Estimated Number of Individual Participants in Federally Supported Education and Training in the Sciences, by Kind of Recipient: Fiscal Years 1959 and 1960**

[Data exclude research and research facilities]

| Kind | Number | |
|---|---|---|
| | 1959 | 1960 |
| Graduate students | 46,343 | 47,920 |
| Undergraduate students | 149,516 | 117,078 |
| Elementary-secondary students | 466,450 | 470,000 |
| Trainees, professional | 16,302 | 20,506 |
| Trainees, nonacademic | 458,383 | 473,722 |
| Teachers, Educational Exchange Program | 416 | 416 |
| Other individuals | 624 | 624 |

Graduate students in the sciences consist largely of recipients of fellowship awards, teachers and others in training grant programs, graduate students enrolled at Howard University and Gallaudet College, and military personnel enrolled in graduate level work in civilian educational institutions.

Undergraduate students are participants in outservice training programs for military and civilian personnel, cadets at the military and Coast Guard academies, veterans enrolled in the sciences, and undergraduate level participants in research participation and teacher training programs.

Elementary-secondary students are participants in federally supported vocational education programs.

Professional trainees are recipients of postdoctoral fellowship and traineeship grants and participants in outservice training programs for Federal professional personnel, and participants in training grant programs for advanced study.

Nonacademic trainees consist largely of participants in adult education level vocational and technical training activities.

Teachers are recipients of grants for teaching under the Educational Exchange Program.

Other individuals include recipients of research grants and grants for advisory services, technical training, and observation under the Educational Exchange Program.

**Table 66.—Estimated Number of Individual Participants in Federally Supported Education and Training in the Sciences, by Selected Type of Program: Fiscal Years 1959 and 1960**

[Data exclude research and research facilities]

| Type of program | Number of recipients | |
|---|---|---|
| | 1959 | 1960 |
| Fellowships | 11,386 | 12,922 |
| Traineeships | 5,091 | 7,265 |
| Training grants[1] | 43,007 | 45,490 |
| Teaching grants | 416 | 416 |

[1] Data incomplete.

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# Appendix A

# Technical Notes

The relationships of the Federal Government and the educational system of the Nation may be looked at in many ways. The broad concerns of this report are with educational finance and manpower development. The particular methods employed in providing funds for education are of interest for purposes of classification and analysis, but are not limiting factors in the content of the report. "Federal funds for education" includes grants to State and local governments in support of educational programs; payments to individuals for use in paying educational expenses; payments to educational institutions for services; and grants, payments, loans, transfer of property, or provision of services to educational institutions and agencies.

## Limitations of Data

The data in this report were provided by Federal agencies in response to a mail questionnaire. The questionnaire and instructions for completing it are reproduced in appendix B. There were numerous conferences with agency personnel responsible for providing the data. One of the chief problems was that of establishing the concept of "Federal funds for education." Many Federal programs, such as support of vocational education, clearly belong under such a heading. Other programs have specifically defined purposes that do not indicate concern for education as such.

The data on research are not complete. Research grants and contracts and research facilities grants of some agencies were not reported on the basis that they were for purchase of services or served specific purposes other than support of education. Research contracts involving operation of research centers by universities were interpreted in some cases to be outside the criteria for reporting. Outservice training of Federal employees was not fully reported. In both these areas, however, publications of the National Science Foundation and the Civil Service Commission may be consulted for more complete data, although in less detail than that requested for the present study.[1]

Some of the difficulties in the breakdown of program data for reporting on the basis of fields of study and academic levels were discussed in section 1. Many of the difficulties in this area are a result of program reporting systems which are not concerned with this kind of data. The survey on which this report is based was the first to request data by field, level, and kind of recipient; and some agency reporting systems could not produce data in this detail. It is expected that the data can be broken down more completely in future surveys.

Data on inservice training programs of Federal agencies were not requested. The impact of such programs on manpower development is certainly great, and analysis is needed in this area for a complete picture of Federal activities supporting the development of the Nation's manpower resources. These programs are outside the scope of this study, however.

A variety of terms was used in reporting financial data. Since some agencies found it not practical to report expenditures by activity, the data include expenditures for some programs and obligations, commitments, awards, and encumbrances for others. The number of recipients was not uniformly reported. In some cases direct recipients, such as a university or a State, were identified, but the number of individuals supported in some degree was not reported. Future surveys are expected to provide data that will be more nearly complete and uniform, since the agencies will be requested to supply information on both direct and indirect recipients.

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[1] U.S. Congress, House, Committee on Post Office and Civil Service, *Training of Federal Employees: Report of the Civil Service Commission to the President on Training Activities in Federal Agencies Under the Government Employees Training Act*, February, 1961. Washington, Government Printing Office, 1961 (87th Cong., 1st sess., Committee Print), and *Federal Funds for Science, IX: The Federal Research and Development Budget, Fiscal Years 1959, 1960, and 1961*. National Science Foundation. Washington: U.S. Government Printing Office, 1960.

It is believed that the financial data and the data on recipients, subject to the limitations just cited, provide a good indication of the level of Federal activity in providing funds for education as defined for this report and of the impact of these activities on manpower development. It is anticipated that future surveys will result in more comprehensive data as programs within the criteria are identified and as discussions continue with the agencies concerned on the need for the data and its uses.

## Comparability With Other Data

The Office of Education publication, *Federal Funds for Education, 1958–59 and 1959–60,*[2] reports Federal educational programs on the basis of the same criteria used in the present publication. Differences in totals for comparable years are accounted for by the use of allotment figures for some of the programs in the former publication and the use of expenditure figures in this report for the same programs.

The National Science Foundation circulars, *Federal Funds for Science*, present data by agency and program on obligations of Federal agencies for research and development through educational institutions. These circulars do not give detailed breakdowns by fields of study, academic levels, and kind and number of recipients, but they do indicate a higher level of Federal activity than is reported in the present study. Most of the differences in amounts reported by the National Science Foundation and the Office of Education in this study for fiscal years 1959 and 1960 are in research project grants and research facilities grants of the National Institutes of Health and contracts of the Atomic Energy Commission and the National Aeronautics and Space Administration for research in research centers associated with universities.[3]

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[2] Bulletin 1961, No. 14 (OE-10009), by Clayton D. Hutchins, Albert R. Munse, and Edna D. Booher. Washington: U.S. Government Printing Office, 1961.

[3] See discussion of research data on p. 4, *supra*.

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# Appendix B

Department of Health, Education, and Welfare
Office of Education
Washington 25; D. C.

## FEDERA

The Office of Education is gathering new informati
tion. In agreement with present-day interests, spe
SCIENCE education. Data for the new publication

**Part I** A comprehensive report on all Fede
programs for which the Federal Dep
use the format of the preceding publ
1957-58."

**Part II** A supplementary report for programs
Part II, selected facts have been id

## FEDERAL F

The attached printed pages have been taken from t
and 1957-58," for--

/NA

A revision of this material is needed at the presen

1. Supply figures for the next two years fol

2. Supply corrected figures for preceding y

3. Revise the discussion statements so th
operating.

4. Report similar figures and discussion fo
for your Agency in the earlier publicatio

   a. Programs of Federal assistance give
   institutions, including Federal, Stat

   b. Programs of research and training co
   operated by them) and hospitals, and
   technicians in Federal institutions.

   c. Programs in which a pupil-teacher re
   Office provides instruction, lectures
   expenses required by students engag

5. Identify the person in your Agency whon
necessary. For the preceding publicati
/NAME

: FIELDS, LEVELS, RECIPIENTS, 1959 AND 1960

Form approved
Budget Bureau No. 51-R338

## L FUNDS FOR EDUCATION

### General Information

on for the next publication in the series on Federal Funds for Educa-
cial consideration and emphasis will be given to Federal programs in
to be issued in 1960 may be considered in two parts:

ral programs in education is to be prepared for those education
artments, Agencies, or Offices are responsible. This part will
lication entitled, "Federal Funds for Education, 1956-57 and

in the sciences and in other fields is to be prepared. For
entified for reporting on Form SF-3.

## UNDS FOR EDUCATION—PART I

### Instructions

he former publication entitled, "Federal Funds for Education, 1956-57
ME OF PROGRAM7

t time. Please give the following information:

lowing those reported in the enclosed pages.

ears, where necessary.

at they accurately describe the program as it is currently

r any new Federal program in education that was not reported
n. Programs to be reported include the following:

n in the form of commodities, funds, or services to educational
e, and local or private educational agencies.

nducted in educational institutions (including research centers
l programs for the training of non-Federal research workers and

elationship exists for which a Federal Department, Agency, or
, tuition, contracts for educational services, school housing, or
ged in educational activities under Federal sponsorship.

n the Office of Education may contact for further information, if
on, information for the above-named program was furnished by—
OF RESPONDENT7

Department of Health, Education, and Welfare
Office of Education
Washington 25, D. C.

Form approved
Budget Bureau No. 51-R338

## FEDERAL FUNDS FOR EDUCATION--PART II
### Instructions

For this part, the programs which are generally identified and described in Part I will be reported in greater detail. This additional information is to be given on Form SF-3, as described in the instructions below:

A. **Name of Federal educational activity.**--Identify the specific activity and give the general program name used for Part I of which this activity is a part. A separate Form SF-3 should be used to report each activity and each activity should meet the following requirements:

1. PERTAIN TO ONLY ONE FIELD OF STUDY. If no field of study can be identified, this fact may be reported as indicated in the instructions in item "C" below.
2. PERTAIN TO ONLY ONE ACADEMIC LEVEL. See item "D" below.
3. PERTAIN TO ONLY ONE KIND OF RECIPIENT. See item "F" below.

B. **Organizational unit that administers the activity.**--The name to be entered for this item should indicate the Bureau, Office, or similar major unit in the Department or Agency structure which is responsible for the administration of the specified activity.

C. **Field of study.**--Information for this item is to be provided by placing an "X" in the box by the field of study to which the activity relates. Only ONE field of study should be marked for each separate activity. To assist in classifying the activities, a listing of major areas within the fields of study is provided on page 3 of these instructions.

If an activity cannot be classified according to a field of study, "X" the box for NOT APPLICABLE. Activities directed to training in general, for which an identification of separate fields of study is not possible, are to be noted with an "X" in the box for GENERAL.

D. **Academic level.**--The academic level directly involved with the specified activity is to be indicated by placing an "X" on Form SF-3 in the box by the appropriate "level." Only ONE of the expressions should be marked for each separate activity.

| | |
|---|---|
| 1. Postdoctoral: | For persons who have completed the doctorate. |
| 2. Graduate: | For persons who have bachelor's degrees and who are enrolled for work regarded as graduate level. Include students studying for all first professional degrees. |
| 3. Undergraduate: | For persons enrolled as undergraduate students or receiving instruction regarded as college level below the bachelor's-degree level. |
| 4. Adult education: | For persons above high-school age involved in educational pursuits not classifiable in the above categories. |
| 5. Elementary-secondary: | For children enrolled in the elementary and secondary school grades. |
| 6. Other: | For persons not properly identifiable in any of the above categories. |

E. **Amount of Federal support.**--The program amount shown in Part I is to be divided into portions appropriate to the separate activities. The following instructions should be observed in reporting dollars for an activity:

1. List amounts expended or disbursed for fiscal years 1957-58 and 1958-59.
2. Estimate the expenditure or disbursement amount for 1959-60 and for the preceding years listed, if the actual amounts are not available. Please indicate when estimates are used.
3. Amounts reported for each fiscal year should include only funds for the activity, i.e., field of study, academic level, and kind of recipient, identified on the form.
4. If the terms "expended" or "disbursed" do not apply, but some other expression describes the amount reported, please indicate the appropriate term in the space provided in item "E" on Form SF-3.
5. The sum of the figures for the individual activities, for each of the years included, should be in agreement with the broader program total reported for Part I. Any difference in these total figures should be explained.

F. **Number and kind of recipient.**--Information on recipients is needed to provide some measure of the extent that educational services are offered or assisted. Where possible, this measure should report the number of individuals receiving assistance.

The kind of recipient person is to be specified in terms appropriate to the academic level involved. For example, in higher education the following terms could be used: Fellows, research assistants, teaching assistants, etc. Obviously, other terms such as enrollees or trainees might be supplied for elementary and secondary education and for adult education activities.

In some instances, such terms as those for the number of individuals do not apply and other expressions will be required. Such terms as schools, colleges, projects, courses, States, nations, etc., may be used.

……

## FIELDS OF STUDY – for Item "C"

1. **NOT APPLICABLE** – Include here those programs of Federal support which may not be classified according to a field of study.

2. **GENERAL** – Include here programs for which assistance is directed to training in general and for which no identification of separate fields of study is possible.

3. **AGRICULTURAL SCIENCES** – Includes areas such as:

- Agronomy
- Animal husbandry
- Crops
- Dairy husbandry
- Fisheries
- Food technology
- Forestry
- Horticulture
- Range management
- Soils
- Wildlife

4. **BIOLOGICAL SCIENCES** – Includes areas such as:

- Anatomy
- Anthropology (physical)
- Bacteriology
- Biochemistry
- Biology
- Biophysics
- Botany
- Entomology
- Microbiology
- Nutrition
- Paleontology
- Pathology
- Pharmaceutical sciences
- Physiology
- Psychology (physiological)
- Zoology

5. **CLINICAL SCIENCES** – Includes areas such as:

- Anesthetics
- Cardiology
- Dermatology
- Geriatrics
- Internal medicine
- Neurology
- Nursing (general)
- Obstetrics and gynecology
- Ophthalmology
- Otholaryngology
- Pediatrics
- Pedodontics
- Periodontics
- Prosthodontics
- Psychiatry
- Psychology (clinical)
- Surgery

6. **EDUCATION** – Includes teacher-training area:

- Agriculture
- Business and commercial
- Distributive education
- General teaching fields
- Home economics
- Industrial arts
- Nonteaching fields
- Physical education (including health)
- Special education for the handicapped
- Trade and industry

7. **ENGINEERING** – Includes areas such as:

- Aeronautical
- Agricultural
- Architectural
- Ceramic
- Chemical
- Civil
- Electrical
- Geological
- Industrial
- Mechanical
- Metallurgical
- Mineral
- Mining
- Petroleum

8. **PHYSICAL SCIENCES** – Includes areas such as:

- Astronomy
- Chemistry
- Geography (physical)
- Geology
- Geophysics
- Mathematics
- Metallurgy
- Meteorology
- Oceanography
- Physics

9. **SOCIAL SCIENCES** – Includes areas such as:

- Agricultural economics
- Anthropology (social)
- Archeology
- Economics
- Geography (econ. and social)
- History
- Military science
- Political science
- Psychology (social)
- Sociology
- Statistics

10. **OTHER FIELDS** – Include fields here that are not classifiable in the above general categories such as:

- Accounting
- Business admin.
- English and journalism
- Fine and applied arts
- Foreign languages
- Home economics
- Law
- Library science
- Philosophy
- Religion
- Trade and industry

GPO 889680

Form SF-3

Form approved
Budget Bureau No. 51-R338

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education

## FEDERAL FUNDS FOR EDUCATION–PART II

Department or Agency ____________________ Date ____________________

Name of respondent ____________________ Title ____________________

**A. Name of Federal educational activity** (See instructions, item A)

Name ____________________

**B. Organizational unit that administers the activity** (See instructions, item B)

Unit ____________________

**C. Field of study** (See instructions, item C)
Please "X" only one.

- 1☐ Not Applicable
- 2☐ General
- 3☐ Agricultural Sciences
- 4☐ Biological Sciences
- 5☐ Clinical Sciences
- 6☐ Education
- 7☐ Engineering
- 8☐ Physical Sciences
- 9☐ Social Sciences
- 10☐ Other

If "Other" specify: ____________________

**D. Academic level** (See instructions, item D).
Please "X" only one.

- 1☐ Postdoctoral
- 2☐ Graduate
- 3☐ Undergraduate
- 4☐ Adult education
- 5☐ Elementary-secondary
- 6☐ Other

**E. Amount of Federal support** (See instructions, item E). If the figures for this item are not "expenditures" or "disbursements," please specify the term which does apply to the reported amount–

Term ____________________

| Fiscal year | Amount |
|---|---|
| 1957-58 | $ |
| 1958-59 | |
| 1959-60 | |

**F. Number and kind of recipient** (See instructions, item F). Describe here the kind of recipient to which the numbers in the following table apply–

Kind of recipient ____________________

| Fiscal year | Number of recipients |
|---|---|
| 1957-58 | |
| 1958-59 | |
| 1959-60 | |

NOTE: Please return to: School Finance Section
Office of Education
Department of Health, Education, and Welfare
Washington 25, D. C.

# Appendix C

## Table A-1.—Federal Funds For Education, by Agency, Program, and Activity: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency, program, and activity[1] | 1959 | 1960[2] |
|---|---|---|
| **Department of Health, Education, and Welfare** | $724,692 | $847,452 |
| **Federally Aided Corporations** | | |
| American Printing House for the Blind | 410 | 410 |
| Educational materials for the blind | 410 | 410 |
| Gallaudet College | 881 | 1,116 |
| Graduate training for teachers of the deaf | 35 | 64 |
| Elementary-secondary school for the deaf | 47 | 56 |
| Construction of facilities | 123 | 325 |
| Operation of the undergraduate program | 676 | 671 |
| Howard University: Curriculum | 2,667 | 2,874 |
| Biological science studies in the College of Liberal Arts and Graduate School | 117 | 116 |
| College of Pharmacy | 61 | 60 |
| Biological science studies in the College of Medicine | 423 | 435 |
| Clinical science studies in the College of Medicine | 260 | 256 |
| School of Dentistry | 315 | 374 |
| Education in the College of Liberal Arts and Graduate School | 153 | 150 |
| Physical science studies in the College of Liberal Arts and Graduate School | 295 | 257 |
| Social science studies in the College of Liberal Arts and Graduate School | 126 | 131 |
| General studies in the College of Liberal Arts and Graduate School | 418 | 473 |
| School of Music | 153 | 152 |
| General studies in the College of Medicine | 56 | 157 |
| School of Social Work | 65 | 66 |
| School of Law | 38 | 46 |
| School of Engineering and Architecture | 189 | 202 |
| Howard University: Construction | 286 | 881 |
| Construction of facilities | 286 | 881 |
| Howard University: Operation | 1,475 | 1,476 |
| Administration Office | 569 | 575 |
| Office of the Dean | 30 | 30 |
| Libraries | 181 | 194 |
| Office of the Building Program Coordinator | 4 | 4 |
| Building and Grounds Department | 690 | 672 |
| Howard University: Staff Expenses | 209 | 209 |
| College of Liberal Arts and Graduate School | 54 | 56 |
| School of Engineering and Architecture | 20 | 2[illegible] |
| School of Music | 19 | 19 |
| College of Pharmacy | 18 | 20 |
| College of Medicine | 51 | 44 |
| College of Dentistry | 30 | 30 |
| School of Law | 18 | 16 |
| **Food and Drug Administration** | | |
| Training State and Local Officials in Food and Drug Inspection Techniques | ---------- | 6 |
| Detection of penicillin in milk | ---------- | 3 |
| Detection of pesticides in milk and forage | ---------- | 3 |
| **Office of Education** | | |
| Administration of the Office of Education | 8,229 | 10,327 |
| Administration | 8,229 | 10,327 |
| Civil Defense Adult Education | ---------- | 557 |
| Civil defense training | ---------- | 557 |
| Cooperative Research in Education | 2,681 | 3,200 |
| Research in colleges and universities | 2,210 | 2,976 |
| Research in State educational agencies | 472 | 224 |
| Improvement of State Educational Statistical Services | 238 | 1,129 |
| Improvement of statistical services | 238 | 1,129 |
| Rural Library Services | 5,218 | 7,500 |
| Support of library services | 5,218 | 7,500 |
| **Office of Education—Continued** | | |
| Promotion of New Educational Media | (3) | $3,915 |
| Grants to private nonprofit organizations | (3) | 660 |
| Grants to professional associations | (3) | 260 |
| Grants to State departments of education | (3) | 250 |
| Grants to colleges and universities | (3) | 2,590 |
| Grants to State special schools | (3) | 25 |
| Grants to public school systems | (3) | 130 |
| School Assistance in Federally Affected Areas | $215,066 | 233,500 |
| Maintenance and operation | 138,874 | 160,500 |
| School construction | 76,192 | 73,000 |
| Improvement in Science, Mathematics, and Foreign Language Instruction | 57,350 | 64,000 |
| Grants to public schools | 49,280 | 52,800 |
| Loans to nonpublic schools | 6,720 | 7,200 |
| Aid for State supervisory and related services | 1,350 | 4,000 |
| Instruction in Land-Grant Colleges and Universities | 5,052 | 5,052 |
| Instruction in agricultural sciences | 792 | 795 |
| Instruction in biological sciences | 1,342 | 1,350 |
| Instruction in engineering | 1,416 | 1,415 |
| Instruction in education | 27 | 27 |
| Instruction in social sciences | 371 | 375 |
| Instruction in mathematics | 446 | 440 |
| Instruction in English language | 657 | 650 |
| Secondary School Guidance, Counseling, and Testing Services | 7,400 | 15,000 |
| Guidance, counseling, and testing services | 7,400 | 15,000 |
| Vocational Education | 41,399 | 46,226 |
| General continuation trade and industrial education | 8 | 5 |
| Fishery occupations training | 58 | 65 |
| Practical nurse training | 2,161 | 3,500 |
| Area vocational education | 2,746 | 5,000 |
| Agricultural education for adults | 340 | 340 |
| Agricultural education in secondary schools | 12,600 | 13,300 |
| Teacher training in agricultural education | 728 | 800 |
| Distributive occupational training in secondary schools | 1,218 | 1,225 |
| Distributive occupational training in colleges | 134 | 140 |
| Distributive occupational training for adults | 1,151 | 1,000 |
| Teacher training in home economics education | 707 | 725 |
| Home economics education in elementary and secondary schools | 7,568 | 8,275 |
| Home economics education for homemakers | 631 | 631 |
| Trade and industrial education for teachers and journeymen | 365 | 370 |
| Trade and industrial education for industrial workers | 3,396 | 3,450 |
| Trade and industrial education in secondary schools | 7,588 | 7,400 |
| Fellowships in Programs for the Education of the Mentally Retarded | (4) | 1,000 |
| Training instructors for preparation of teachers of the mentally retarded | (4) | 430 |
| Training supervisors for programs for education of the mentally retarded in school systems | (4) | 570 |
| Student Loan Fund, NDEA | (3) | 9,619 |
| Actual loans to students | (3) | 9,502 |
| Institutional loans | (3) | 117 |
| NDEA Fellowships: Institutional Grants | (3) | 2,350 |
| Grants in agricultural sciences | (3) | 85 |
| Grants in biological sciences | (3) | 287 |
| Grants in education | (3) | 110 |
| Grants in engineering | (3) | 139 |
| Grants in physical sciences | (3) | 526 |
| Grants in social sciences | (3) | 620 |
| Grants in humanities | (3) | 583 |
| NDEA Fellowships | (3) | 2,320 |
| Awards in agricultural sciences | (3) | [illegible] |
| Awards in biological sciences | (3) | 28[illegible] |
| Awards in education | (3) | 109 |
| Awards in engineering | (3) | 137 |
| Awards in physical sciences | (3) | 520 |
| Awards in social sciences | (3) | 612 |
| Awards in humanities | (3) | 575 |

See footnotes at end of table.

## Table A-1.—Federal Funds for Education, by Agency, Program, and Activity: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Agency, program, and activity | 1959 | 1960[1] |
|---|---|---|
| **Office of Education—Continued** | | |
| Counseling and Guidance Institutes, NDEA | (3) | $3, 388 |
| Grants to institutions for the academic year 1959–60 | (3) | 419 |
| Stipends to enrollees for the academic year 1959–60 | (3) | 720 |
| Stipends to enrollees for the summer session 1959 | (3) | 1, 585 |
| Grants to institutions for the summer session 1959 | (3) | 663 |
| Research and Studies in Language Development, NDEA | (3) | 3, 390 |
| Grants to a public school system | (3) | [illegible] |
| Grants for individual research | (3) | [illegible] |
| Grants to associations | (3) | 1, 786 |
| Grants to institutions of higher education | (3) | 508 |
| Grants to language and area centers | (3) | 500 |
| Grants for language fellowships | (3) | 474 |
| Language Development Institutes, NDEA | (3) | 2, 566 |
| Stipends to enrollees for the academic year 1959–60 | (3) | 1, 043 |
| Grants to institutions for the academic year 1959–60 | (3) | 551 |
| Grants to institutions for the summer session 1959 | (3) | 357 |
| Stipends to enrollees for the summer session 1959 | (3) | 615 |
| **Office of Vocational Rehabilitation** | | |
| Rehabilitation Research Fellowships, OVR | $42 | 103 |
| Research fellowships | 42 | 103 |
| Rehabilitation Research and Demonstration Project Grants, OVR | 4, 600 | 6, 500 |
| Research and demonstration grants | 4, 600 | 6, 500 |
| Rehabilitation Training Grants, OVR | 4, 757 | 6, 097 |
| Grants in rehabilitation counseling | 1, 297 | 1, 555 |
| Grants in speech pathology and audiology | 198 | 425 |
| Grants in physical therapy | 115 | 171 |
| Grants in nursing | 68 | 100 |
| Grants in social work | 455 | 549 |
| Grants in medicine | 1, 070 | 1, 471 |
| Grants in occupational therapy | 145 | 210 |
| Grants in prosthetics and orthotics | 286 | 328 |
| Rehabilitation center administration, inservice training, and special areas grants | 337 | 488 |
| Short-term grants | 786 | 800 |
| **Public Health Service** | | |
| Training for State Public Health Personnel at the Communicable Disease Center | 769 | 643 |
| Laboratory and field training | 769 | 643 |
| Education in Public Health Service Hospitals | 226 | 265 |
| Quarters and subsistence for medical record librarian students | 5 | 5 |
| Basic education at the Carville, La., hospital | 16 | 17 |
| Freedmen's Hospital School of Nursing | 206 | 243 |
| Training of Indian Health Personnel | 283 | 301 |
| Training of practical nurses | 277 | 295 |
| Dental assistants training course | 6 | 6 |
| Training at the Robert A. Taft Sanitary Engineering Center | 318 | 476 |
| Advanced training in environmental health laboratory techniques | 318 | 476 |
| Grants to States for Public Health Personnel | 1, 272 | 1, 423 |
| Grants to States for training | 1, 272 | 1. 423 |
| Experimental Training Grants to Medical Schools, NIH | 500 | 500 |
| Training grants in biological sciences | 500 | 500 |
| Research Training Grants, NIH | 5, 705 | 11, 350 |
| Postdoctoral grants in biological sciences | 1, 997 | 3, 973 |
| Predoctoral grants in biological sciences | 3. 708 | 7, 378 |
| Training Grants and Traineeships, Cancer Institute | 5, 909 | 6, 604 |
| Direct clinical traineeships | 797 | 868 |
| Direct exfoliative cytology traineeships | 133 | 126 |
| Research training grants | 2, 536 | 3, 165 |
| Training grants to medical, dental, and osteopathic schools | 2, 444 | 2, 445 |
| **Public Health Service—Continued** | | |
| Training Grants, Heart Institute | $7, 232 | $7, 791 |
| Postdoctoral grants in clinical sciences | 2, 714 | 3, 060 |
| Postdoctoral grants in education | 210 | 301 |
| Cardiovascular training grants to schools of medicine, osteopathy, and public health | 2, 390 | [illegible] |
| Postdoctoral grants in biological sciences | 1, 664 | [illegible] |
| Postdoctoral grants in engineering | 36 | [illegible] |
| Postdoctoral grants for symposia and publications | 218 | [illegible] |
| Training Grants, Institute of Allergy and Infectious Diseases | 1, 759 | 3, 535 |
| Postdoctoral grants in biological sciences | [illegible] | 483 |
| Predoctoral grants in biological sciences | 558 | 1, 458 |
| Postdoctoral grants in clinical sciences | 640 | 1, 203 |
| Predoctoral grants in clinical sciences | 176 | 391 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Diseases | 2, 256 | 4, 385 |
| Traineeships for research fellows in clinical sciences | 265 | 358 |
| Postdoctoral training grants in clinical sciences | 1, 870 | 3, 196 |
| Postdoctoral training grants in biological sciences | 121 | 831 |
| Training Grants, Institute of Dental Research | 650 | 1, 073 |
| Graduate research grants in biological sciences | 238 | 557 |
| Graduate research grants in clinical sciences | 412 | 516 |
| Training Grants and Fellowships, Institute of Mental Health | 19, 892 | 22, 641 |
| Career investigator fellowships in clinical sciences | 239 | 262 |
| Career investigator fellowships in biological sciences | 68 | 63 |
| Psychiatry for undergraduate nurses | [illegible] | 921 |
| Pilot projects including special grants | [illegible] | 542 |
| Training grants in graduate psychiatry | 6, 524 | 7, 813 |
| Training grants in psychiatry and human behavior to schools of medicine and osteopathy | 2, 443 | 2, 640 |
| Training grants in clinical psychology, graduate nursing, and public health mental health | 4, 443 | 4, 999 |
| Training grants in physiological psychology and biological sciences | 802 | 1, 104 |
| Training grants in psychology and social sciences | 325 | 575 |
| Training grants in undergraduate psychology | 2 | 5 |
| Training grants in social work | 3, 325 | 3, 717 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 5, 638 | 7, 284 |
| Direct traineeships in biological sciences | 682 | [5] 893 |
| Direct traineeships in clinical sciences | 534 | [5] 774 |
| Training grants in clinical sciences | 3, 581 | 4, 439 |
| Training grants in biological sciences | 841 | 1, 179 |
| Research Fellowships, NIH | 10, 003 | 14, 384 |
| Graduate fellowships in other fields | 101 | 918 |
| Postdoctoral fellowships in general studies | 0 | [5] 60 |
| Postdoctoral fellowships in agricultural studies | 9 | [5] 6 |
| Senior fellowships | 1, 378 | 2, 980 |
| Postsophomore fellowships | 436 | 500 |
| Student part-time fellowships | 682 | 756 |
| Foreign fellowships | 341 | 400 |
| Postdoctoral fellowships in biological studies | 2, 149 | [5] 2, 444 |
| Postdoctoral fellowships in clinical studies | 1, 917 | [5] 1, 695 |
| Postdoctoral fellowships in education | 31 | [5] 59 |
| Postdoctoral fellowships in engineering | 1 | [5] 3 |
| Postdoctoral fellowships in physical sciences | 247 | [5] 346 |
| Postdoctoral fellowships in social sciences | 62 | [5] 57 |
| Postdoctoral fellowships in other fields | 149 | [5] 1, 943 |
| Graduate fellowships in general studies | 0 | [5] 10 |
| Graduate fellowships in agricultural studies | 0 | [5] 8 |
| Graduate fellowships in biological studies | 1, 574 | [5] 1, 586 |
| Graduate fellowships in clinical studies | 27 | [5] 43 |
| Graduate fellowships in education | 11 | [5] 1 |
| Graduate fellowships in engineering | 16 | [5] 19 |
| Graduate fellowships in physical sciences | 164 | [5] 330 |
| Graduate fellowships in social sciences | 111 | [5] 221 |
| Traineeships for Public Health Personnel and Nurses | 8, 495 | 8, 807 |
| Public Health personnel | 2, 561 | 3, 074 |
| Nurses | 5, 935 | 5, 733 |
| **St. Elizabeths Hospital** | | |
| Chaplain Training at St. Elizabeths Hospital | 3 | 6 |
| Catholic chaplain and pastoral training | [6] 3 | [6] 6 |
| Protestant chaplain and pastoral training | (7) | (7) |

**See footnotes at end of table.**

## Table A-1.—Federal Funds for Education, by Agency, Program, and Activity: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Agency, program, and activity | 1959 | 1960[1] |
|---|---|---|
| **St. Elizabeths Hospital—Continued** | | |
| Nursing Education at St. Elizabeths Hospital | (7) | (7) |
| Psychiatric nursing field experiences—graduate students | (7) | (7) |
| Basic psychiatric nursing—undergraduate students | (7) | (7) |
| Affiliate nursing student education | (7) | (7) |
| Occupational Therapy Intern Training at St. Elizabeths Hospital | (7) | (7) |
| Occupational therapy intern training | (7) | (7) |
| Training in Psychotherapy at St. Elizabeths Hospital | (7) | (7) |
| Dance therapy | (7) | (7) |
| Psychodrama | (7) | (7) |
| Volunteer Training at St. Elizabeths Hospital | (7) | (7) |
| Volunteer training | (7) | (7) |
| Resident and Intern Training in the Clinical Sciences at St. Elizabeths Hospital | [1] $121 | $181 |
| Psychiatric residents | 77 | 112 |
| Medical interns | 27 | 49 |
| Radiology residents | 7 | 6 |
| Surgical residents | 10 | 14 |
| Intern training in clinical psychology | (7) | (7) |
| **Social Security Administration** | | |
| Training State Personnel in Maternal and Child Health Programs | 1,532 | 1,586 |
| Training of professional employees | 1,532 | 1,586 |
| Training State Personnel in Child Welfare Agencies | 1,133 | (7) |
| Training of social workers | 1,133 | (7) |
| Training State Personnel in Public Assistance Agencies | 669 | 10 |
| National seminars for employees | (7) | 10 |
| Educational leave for employees | [8] 669 | (7) |
| **Surplus Property Utilization Division** | | |
| Surplus Property, Original Cost | 292,366 | 319,500 |
| Transferred donable personal property | 279,764 | 308,000 |
| Transferred real property | 12,603 | 11,500 |
| **Department of Agriculture** | **383,386** | **420,315** |
| **Agricultural Marketing Service** | | |
| School Lunch Program | 275,945 | 305,512 |
| Special milk | 72,600 | 79,400 |
| School lunch program: Funds | 93,853 | 93,814 |
| School lunch program: Value of commodities | 109,492 | 132,297 |
| **Agricultural Research Service** | | |
| State Agricultural Experiment Stations | 30,846 | 30,846 |
| Support of agricultural research | 24,446 | 24,446 |
| Support of regional research projects | 5,900 | 5,900 |
| Support of agricultural marketing research | 500 | 500 |
| **Federal Extension Service** | | |
| Cooperative Agricultural Extension Program | 53,715 | 53,715 |
| Support for cooperative extension work | 52,220 | 52,220 |
| Support for educational work in marketing | 1,495 | 1,495 |
| **Forest Service** | | |
| School Support From National Forest Revenue [9] | 22,322 | 29,782 |
| National Forest Revenue | 22,205 | 29,669 |
| Revenue from school lands in national forests | 117 | 114 |
| School Support From Submarginal Land Revenue [9] | 558 | 460 |
| Submarginal land revenue | 558 | 460 |
| **Department of Commerce** | **3,492** | **4,383** |
| **National Bureau of Standards** | | |
| Research and Training in the National Bureau of Standards | $104 | $206 |
| Postdoctoral study through non-Government facilities | 8 | 15 |
| Graduate study through non-Government facilities | 10 | 24 |
| Undergraduate study through non-Government facilities | 1 | 5 |
| Postdoctoral resident research associateships | 85 | 163 |
| Graduate school | (7) | (7) |
| **Bureau of the Census** | | |
| Training Foreign Census Technicians | 82 | 89 |
| Training of foreign census technicians | 82 | 89 |
| **Maritime Administration** | | |
| Merchant Marine Schools | 3,266 | 4,016 |
| Merchant Marine Academy | 2,574 | 2,900 |
| State marine schools | 692 | 1,116 |
| **Weather Bureau** | | |
| Training Foreign Meteorologists | 41 | 72 |
| Training foreign meteorologists | 41 | 72 |
| **Department of Defense** | **300,877** | **346,986** |
| **Department of the Air Force** | | |
| Professional Training for Air Force Medical Officers | 72 | 85 |
| Studies in biological sciences | 5 | 9 |
| Studies in clinical sciences | 49 | 59 |
| Studies in hospital administration | 17 | 17 |
| U.S. Air Force Academy | 15,770 | 15,882 |
| Training of cadets | 15,770 | 15,882 |
| U.S. Air Force Institute of Technology—Nonresident Training | 3,504 | 4,776 |
| Graduate studies in engineering | 202 | 271 |
| Short courses in all fields and training in industry | 434 | 661 |
| Foreign language training | 1,966 | 2,683 |
| Undergraduate studies in management | 69 | 76 |
| Graduate studies in management | 189 | 233 |
| Undergraduate studies in physical and biological sciences | 220 | 383 |
| Graduate studies in physical and biological sciences | 174 | 212 |
| Undergraduate studies in engineering | 250 | 257 |
| **Department of the Army** | | |
| Professional Training for Army Medical Service Officers | 168 | 208 |
| Short course | 72 | 99 |
| Graduate studies in clinical sciences | 2 | 9 |
| Undergraduate studies in clinical sciences | 3 | 3 |
| General studies in clinical sciences | 16 | 21 |
| Graduate studies in biological sciences | 26 | 21 |
| Undergraduate studies in biological sciences | 5 | 6 |
| General studies in biological sciences | 1 | (10) |
| Graduate studies in agricultural sciences | 3 | 2 |
| Undergraduate studies in agricultural sciences | 0 | (10) |
| General studies in agricultural sciences | 1 | 0 |
| Graduate studies in general fields | 20 | 25 |
| Undergraduate studies in general fields | 1 | 4 |
| Graduate studies in social sciences | 4 | 5 |
| Undergraduate studies in social sciences | 1 | 3 |
| Graduate studies in education | 13 | 9 |
| Undergraduate studies in education | 1 | 0 |
| General studies in education | (10) | 1 |
| Education at Civilian Institutions for Army Personnel | 710 | 863 |
| Graduate studies in engineering | 233 | 143 |
| Graduate studies in the physical sciences | 111 | 244 |
| Graduate studies in business and language areas | 251 | 85 |
| Undergraduate studies in engineering | 98 | 118 |
| Undergraduate studies in physical sciences | 8 | 72 |
| Undergraduate studies in business areas | 10 | 205 |
| U.S. Military Academy | 12,401 | 12,112 |
| Training of cadets | 12,401 | 12,112 |

**See footnotes at end of table.**

## Table A-1.—Federal Funds for Education, by Agency, Program, and Activity: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Agency, program, and activity | 1959 | 1960[1] |
|---|---|---|
| **Department of the Navy** | | |
| Cooperative Work-Study Program for Navy Employees | $429 | $383 |
| Training of civilian employees | 429 | 383 |
| Education at Civilian Institutions for Navy Personnel | 4,637 | 5,008 |
| Regular ROTC | 3,756 | 3,948 |
| Postgraduate training | 377 | 375 |
| Enlisted scientific education | 293 | 520 |
| Naval aviation cadet training and five-term program | 210 | 165 |
| Public Schools in Northern Mariana—Saipan District | 103 | 101 |
| Support of public schools | 103 | 101 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 234 | 237 |
| Postdoctoral studies in physical sciences | 10 | 8 |
| Officer training in business administration | 1 | (10) |
| Postdoctoral studies in clinical sciences | 36 | 36 |
| Officer training in clinical sciences | 7 | 12 |
| Officer and enlisted training in clinical sciences | 127 | 128 |
| Officer training in biological sciences | 20 | 19 |
| Officer and enlisted training in biological sciences | 1 | 2 |
| Officer training in engineering | (10) | (10) |
| Officer training in physical sciences | 7 | 4 |
| Officer and enlisted training in physical sciences | 6 | 5 |
| Officer and enlisted training in social sciences | 1 | 1 |
| Officer training in hospital and business administration | 1 | 1 |
| Officer and enlisted training in hospital and business administration | 17 | 20 |
| Federal Council on Medical Education for National Defense Program | 405 | 473 |
| Studies in medical schools | 405 | 473 |
| U.S. Naval Academy | 10,332 | 10,392 |
| Training of midshipmen | 10,332 | 10,392 |
| **Departments of the Army, Navy, and Air Force** | | |
| Education of Dependents of Military Personnel | 30,134 | 34,150 |
| Education of children in oversea areas | 29,699 | 33,700 |
| Operation of school buses for children | 435 | 450 |
| Education of Civilian Employees | 2,645 | 3,938 |
| General studies | 2,645 | 3,938 |
| Off-Duty Education of Active Military Personnel | 12,081 | 12,199 |
| Classroom opportunites | 8,729 | 8,500 |
| USAFI | 3,351 | 3,699 |
| Research and Development Contracts | 207,253 | 246,176 |
| Projects at educational institutions | 143,833 | 153,568 |
| Projects at research centers of educational institutions | 63,420 | 92,608 |
| **Department of the Interior** | **101,549** | **105,894** |
| **Bureau of Commercial Fisheries** | | |
| Public Schools in the Pribilof Islands | 51 | 51 |
| Education in the Pribilof Islands | 51 | 51 |
| **Bureau of Indian Affairs** | | |
| Public Schools for Indians | 47,321 | 50,597 |
| Elementary-secondary schools | 44,711 | 46,832 |
| Vocational education | 2,610 | 3,765 |
| **Bureau of Land Management** | | |
| School Support From Public Land Revenue [9] | 51,276 | 53,250 |
| Public domain grazing lands | 433 | 450 |
| Public domain mineral lands | 35,807 | 36,500 |
| Revested and reconveyed lands | 14,762 | 16,000 |
| Sale of public lands and materials | 274 | 300 |
| **Bureau of Mines** | | |
| Safety Training for Mine Workmen | 1,200 | 1,250 |
| Safety training | 1,200 | 1,250 |
| **National Park Service** | | |
| Education of Dependents of National Park Service Employees | $38 | $59 |
| Crater Lake National Park | 7 | 9 |
| Mammoth Cave National Park | 3 | 5 |
| Wind Cave National Park | 1 | 1 |
| Yellowstone National Park | 27 | 44 |
| **Office of Territories** | | |
| Public Schools in the Trust Territory of the Pacific Islands [11] | 399 | 419 |
| Support of public schools | 399 | 419 |
| Public Schools in American Samoa [11] | 218 | 268 |
| Support of public schools | 218 | 268 |
| Alaska School Construction | 1,047 | ---------- |
| Elementary-secondary | 1,047 | ---------- |
| University | 0 | ---------- |
| **Department of Justice** | **1,416** | **1,604** |
| **Bureau of Prisons** | | |
| Education and Vocational Training in Penal Institutions | 1,182 | 1,373 |
| Vocational education | 686 | 775 |
| General education | 436 | 526 |
| Correspondence study | 60 | 72 |
| **Federal Bureau of Investigation** | | |
| Police Training Schools | 225 | 225 |
| Police training schools | 225 | 225 |
| FBI National Academy | 9 | 6 |
| FBI National Academy | 9 | 6 |
| **Department of Labor** | **10,941** | **12,267** |
| **Bureau of Apprenticeship and Training** | | |
| Promotion of Apprenticeship and Training | 4,009 | 4,047 |
| Promotion of apprenticeship and training | 4,009 | 4,047 |
| **Bureau of Employment** | | |
| Testing, Counseling, and Placement Interviews for High School Seniors | 3,765 | 4,815 |
| Testing, counseling, and interviews for placement | 3,765 | 4,815 |
| **Bureau of International Labor Affairs** | | |
| Training in Labor and Allied Fields for Foreign Visitors | 3,167 | 3,400 |
| Foreign visitor training | 3,167 | 3,400 |
| **Department of State** | **57,811** | **73,760** |
| **Bureau of Educational and Cultural Affairs** | | |
| Grants for Advisory Services and Technical Training, Educational Exchange Program [11] | 2,241 | 2,474 |
| American specialists in agricultural sciences | 9 | 10 |
| American specialists in biological sciences | 5 | 5 |
| American specialists in clinical sciences | 44 | 49 |
| American specialists in education | 240 | 265 |
| American specialists in physical sciences | 9 | 10 |
| American specialists in social sciences | 254 | 281 |
| American specialists in other fields | 134 | 148 |
| Foreign specialists in agricultural sciences | 18 | 20 |
| Foreign specialists in biological sciences | 5 | 5 |
| Foreign specialists in clinical sciences | 67 | 74 |
| Foreign specialists in education | 160 | 176 |
| Foreign specialists in engineering | 12 | 13 |
| Foreign specialists in physical sciences | 4 | 5 |
| Foreign specialists in social sciences | 754 | 832 |
| Foreign specialists in other fields | 526 | 581 |
| Study Grants, Educational Exchange Program [11] | 12,551 | 13,852 |
| American students in agricultural sciences | 44 | 48 |
| American students in biological sciences | 56 | 62 |
| American students in clinical sciences | 48 | 53 |
| American students in education | 35 | 38 |

See footnotes at end of table.

## Table A-1.—Federal Funds for Education, by Agency, Program, and Activity: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Agency, program, and activity | 1959 | 1960[1] |
|---|---|---|
| **Bureau of Educational and Cultural Affairs—Con.** | | |
| Study Grants, Educational Exchange Program [11]—Continued | | |
| American students in engineering | $79 | $87 |
| American students in physical sciences | 374 | 413 |
| American students in social sciences | 865 | 954 |
| American students in other fields | 1,997 | 2,204 |
| Foreign students in agricultural sciences | 358 | 395 |
| Foreign students in biological sciences | 195 | 215 |
| Foreign students in clinical sciences | 793 | 875 |
| Foreign students in education | 656 | 724 |
| Foreign students in engineering | 1,377 | 1,520 |
| Foreign students in physical sciences | 818 | 903 |
| Foreign students in social sciences | 2,386 | 2,633 |
| Foreign students in other fields | 2,471 | 2,727 |
| Grants for Observation and Consultation, Educational Exchange Program [11] | 3,180 | 3,509 |
| Foreign leaders in agricultural sciences | 59 | 65 |
| Foreign leaders in clinical sciences | 76 | 84 |
| Foreign leaders in education | 507 | 560 |
| Foreign leaders in engineering | 32 | 35 |
| Foreign leaders in physical sciences | 13 | 15 |
| Foreign leaders in social sciences | 1,364 | 1,505 |
| Foreign leaders in other fields | 1,128 | 1,245 |
| Research Grants, Educational Exchange Program [11] | 2,450 | 2,704 |
| American research scholars in agricultural sciences | 71 | 78 |
| American research scholars in biological sciences | 17 | 19 |
| American research scholars in clinical sciences | 22 | 24 |
| American research scholars in education | 17 | 19 |
| American research scholars in engineering | 9 | 10 |
| American research scholars in physical sciences | 105 | 116 |
| American research scholars in social sciences | 206 | 227 |
| American research scholars in other fields | 189 | 208 |
| Foreign research scholars in agricultural sciences | 51 | 56 |
| Foreign research scholars in biological sciences | 279 | 308 |
| Foreign research scholars in clinical sciences | 395 | 436 |
| Foreign research scholars in education | 17 | 19 |
| Foreign research scholars in engineering | 96 | 106 |
| Foreign research scholars in physical sciences | 642 | 709 |
| Foreign research scholars in social sciences | 192 | 212 |
| Foreign research scholars in other fields | 141 | 155 |
| Teaching and Teacher Training Grants, Educational Exchange Program [11] | 4,152 | 4,582 |
| American teachers in biological sciences | 5 | 5 |
| American teachers in education | 834 | 921 |
| American teachers in physical sciences | 72 | 79 |
| American teachers in social sciences | 104 | 115 |
| American teachers in other fields | 666 | 735 |
| Foreign teachers in biological sciences | 5 | 5 |
| Foreign teachers in clinical sciences | 4 | 5 |
| Foreign teachers in education | 1,734 | 1,914 |
| Foreign teachers in engineering | 4 | 4 |
| Foreign teachers in physical sciences | 45 | 50 |
| Foreign teachers in social sciences | 347 | 383 |
| Foreign teachers in other fields | 331 | 366 |
| University Teacher Grants, Educational Exchange Program [11] | 2,017 | 2,227 |
| American professors in agricultural sciences | 22 | 24 |
| American professors in biological sciences | 61 | 63 |
| American professors in clinical sciences | 61 | 68 |
| American professors in education | 166 | 184 |
| American professors in engineering | 65 | 72 |
| American professors in physical sciences | 157 | 173 |
| American professors in social sciences | 587 | 648 |
| American professors in other fields | 447 | 493 |
| Foreign professors in agricultural sciences | 9 | 10 |
| Foreign professors in biological sciences | 13 | 14 |
| Foreign professors in clinical sciences | 9 | 10 |
| Foreign professors in education | 9 | 10 |
| Foreign professors in engineering | 26 | 29 |
| Foreign professors in physical sciences | 96 | 106 |
| Foreign professors in social sciences | 127 | 140 |
| Foreign professors in other fields | 162 | 179 |
| **International Cooperation Administration** | | |
| Cooperative Educational Activities in Other Countries | 31,221 | 44,412 |
| Foreign participants | 5,108 | 7,107 |
| Supplies and equipment | 4,067 | 6,243 |
| U.S. technicians | 4,996 | 5,473 |
| Project agreements | 17,050 | 25,589 |
| **Department of the Treasury** | **5,213** | **5,304** |

| Agency, program, and activity | 1959 | 1960[1] |
|---|---|---|
| **Internal Revenue Service** | | |
| Training Enforcement Personnel of the Internal Revenue Service | $1,051 | $1,023 |
| Personal service contracts | 33 | 27 |
| Facilities contracts | 56 | 34 |
| Trainee costs for travel and per diem | 917 | 917 |
| Costs for instructors of trainees—travel and per diem | 46 | 46 |
| **U.S. Coast Guard** | | |
| U.S. Coast Guard Academy | 4,068 | 4,150 |
| U.S. Coast Guard Academy | 4,068 | 4,150 |
| Education of Dependents of U.S. Coast Guard Personnel | 37 | 37 |
| Elementary and secondary education | 37 | 37 |
| U.S. Coast Guard Officer Specialized Training | 56 | 95 |
| Engineering | 48 | 82 |
| Law | 4 | 4 |
| Accounting | 1 | (10) |
| Controllership | 0 | 2 |
| Public administration | 0 | 2 |
| Physical sciences | 2 | (10) |
| Management | 2 | 5 |
| **Atomic Energy Commission** | **51,047** | **62,798** |
| **Division of Biology and Medicine** | | |
| School Equipment and Teacher Training | 1,367 | 1,919 |
| Life sciences training equipment | 1,027 | 1,150 |
| Radiobiology training for high school science teachers | 310 | 600 |
| Faculty training radiobiology lecture series | 4 | 10 |
| Radiobiology training for college faculty | 26 | 159 |
| Contract Research | 12,738 | 17,082 |
| Biological sciences | 12,738 | 17,082 |
| Fellowships in Biology and Medicine | 499 | 630 |
| Health physics | 349 | 436 |
| Industrial hygiene | 51 | 50 |
| Industrial medicine | 99 | 100 |
| Advanced graduate study in radiological health physics | 0 | 44 |
| Special Schools and Courses | 196 | 212 |
| Special training program—radioisotopes | 149 | 162 |
| Traveling science teacher program | 47 | 15 |
| Mobile isotope training program | 0 | 35 |
| **Division of International Affairs** | | |
| Special Schools and Courses | 1,057 | 1,530 |
| International institute of nuclear science and engineering | 639 | 728 |
| Puerto Rico nuclear center | 337 | 650 |
| Monitoring techniques course | 3 | 12 |
| Reactor hazards and supervisors course | 78 | 140 |
| **Divisions of Military Application and of Production** | | |
| Public Schools at AEC Facilities | 4,958 | 4,347 |
| Los Alamos, Oak Ridge, Richland | 4,958 | 4,347 |
| **Division of Reactor Development** | | |
| Assistance to Schools in Reactor Technology | 438 | 1,225 |
| Summer institutes for engineering faculty | 296 | 400 |
| Research participation program in reactor technology | 33 | 125 |
| Nuclear materials and services | 109 | 700 |
| Fellowships in Nuclear Science and Engineering | 426 | 550 |
| Nuclear science and engineering | 426 | 550 |
| Special Schools and Courses | 2,478 | 1,900 |
| Oak Ridge School of Reactor Technology | 65 | 0 |
| Shippingport supervisors course | 96 | 100 |
| Reactor training equipment | 2,263 | 1,800 |
| Development of pedagogical tools | 54 | 0 |

See footnotes at end of table.

## Table A-1.—Federal Funds for Education, by Agency, Program, and Activity: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Agency, program, and activity | 1959 | 1960[1] |
|---|---|---|
| **Division of Research** | | |
| Contract Research | $26,890 | $33,403 |
| Physical sciences | 26,890 | 33,403 |
| **Canal Zone** | **5,019** | **7,855** |
| **Division of School** | | |
| Public Schools | 4,990 | 7,825 |
| Operation of public schools | 4,228 | 4,423 |
| School facilities | 762 | 3,402 |
| **Panama Canal Company** | | |
| Apprentice School, Panama Canal Company | 29 | 30 |
| Apprentice school | 29 | 30 |
| **District of Columbia** | **7,742** | **7,734** |
| **Board of Education** | | |
| Public Schools | 7,742 | 7,734 |
| Capitol Page School | 62 | 63 |
| Expenses 1959–60 | ---------- | 7,671 |
| Capital outlay, 1958–59 | 1,293 | ---------- |
| Current expenses, 1958–59 | 6,386 | ---------- |
| **Department of Public Welfare** | | |
| Education in Public Welfare Institutions | (7) | (7) |
| Maple Glenn School | (7) | (7) |
| Junior Village | (7) | (7) |
| Cedar Knoll School | (7) | (7) |
| National Training School for Boys | (7) | (7) |
| District Training School | (7) | (7) |
| Receiving Home for Children | (7) | (7) |
| **Federal Aviation Agency** | **1,008** | **1,069** |
| **Office of International Coordination** | | |
| Technical Training in Aviation for Foreign Nationals | 994 | 1,034 |
| Technical training of foreign nationals | 994 | 1,034 |
| **Office of Personnel and Training** | | |
| Outservice Training of Employees | 14 | 34 |
| Employee proficiency training | 14 | 34 |
| **Federal Deposit Insurance Corporation** | **14** | **16** |
| Employee Training in Bank Examining and Auditing | 14 | 16 |
| Payment for correspondence courses | 7 | 7 |
| Tuition for resident training in schools of banking | 8 | 9 |
| **Housing and Home Finance Agency** | **0** | **250,000** |
| College Housing Loans[13] | 0 | 250,000 |
| Loans to Colleges | 0 | 250,000 |
| **Library of Congress** | **1,368** | **1,619** |
| **Reference Department** | | |
| Reading Material for the Blind | 1,368 | 1,619 |
| Reading material for the blind | 1,368 | 1,619 |
| **National Aeronautics and Space Administration** | **5,022** | **8,540** |
| **Office of Technical Information and Educational Programs** | | |
| Ames Research Center Training Program | 13 | 33 |
| Studies in physical sciences | (10) | 1 |
| Studies in engineering | 13 | 32 |
| Flight Research Center Training Program | $1 | $2 |
| University studies in physical sciences | 0 | 1 |
| University studies in engineering | 0 | 1 |
| Symposium | 0 | (10) |
| Training for AEC license | 1 | 0 |
| Langley Research Center Training Program | 14 | 33 |
| Studies in management | 0 | 1 |
| Studies in physical sciences | 1 | 6 |
| Studies in engineering | 13 | 25 |
| Lewis Research Center Training Program | 18 | 43 |
| Studies in trade and industry | 0 | 1 |
| Studies in management | 0 | 1 |
| Studies in physical sciences | 0 | 1 |
| Studies in graduate physical sciences | 10 | 20 |
| Studies in postdoctoral physical sciences | 0 | 1 |
| Studies in graduate engineering | 8 | 20 |
| Studies in engineering | 0 | (10) |
| Research Grants and Contracts | 4,976 | 8,420 |
| University studies in engineering | 2,659 | 2,300 |
| University studies in physical sciences | 2,150 | 5,300 |
| University studies in biological sciences | 167 | 820 |
| Space Flight Center Training Program | 0 | 9 |
| Studies in foreign languages | 0 | (10) |
| Studies in social sciences | 0 | (10) |
| Studies in business administration | 0 | (10) |
| Studies in biological sciences | 0 | (10) |
| Studies in undergraduate physical sciences | 0 | (10) |
| Studies in graduate physical sciences | 0 | 7 |
| Studies in graduate engineering | 0 | 1 |
| Studies in undergraduate engineering | 0 | (10) |
| Education of dependents of employees overseas | 0 | (10) |
| **National Science Foundation** | **121,689** | **133,836** |
| **Division of Biological and Medical Sciences** | | |
| Basic Research Grants | 20,462 | 24,500 |
| Grants to college faculty members for biological science studies | 20,462 | 24,500 |
| Research Facilities Grants | 3,270 | 2,844 |
| Biological science studies | 3,270 | 2,844 |
| **Division of Mathematical, Physical, and Engineering Sciences** | | |
| Basic Research Grants | 23,723 | 31,800 |
| Grants to college faculty members for engineering studies | 4,312 | 6,100 |
| Grants to educational institutions for physical science studies | 19,412 | 25,700 |
| Research Facilities Grants | 12,311 | 8,800 |
| Engineering studies | 2,000 | 2,000 |
| Physical science studies | 10,311 | 6,800 |
| **Division of Scientific Personnel and Education** | | |
| Academic Year Institutes for Teachers | 8,787 | 9,211 |
| Physical science studies for teachers of science and mathematics | 1,873 | 3,077 |
| Multiple science disciplines for teachers of science and mathematics | 6,914 | 6,134 |
| Course Content Improvement Grants | 6,030 | 6,000 |
| Grants for elementary-secondary biological studies | 759 | 1,083 |
| Grants for undergraduate biological studies | 26 | 307 |
| Grants for undergraduate engineering studies | 50 | 276 |
| Grants for elementary-secondary studies in general science | 158 | 156 |
| Grants for undergraduate studies in general science | 34 | 0 |
| Grants for elementary-secondary physical science studies | 4,750 | 3,454 |
| Grants for undergraduate physical science studies | 152 | 587 |
| Grants for undergraduate social science studies | 101 | 122 |
| Grants for graduate engineering studies | 0 | 15 |

See footnotes at end of table.

## Table A-1.—Federal Funds for Education, by Agency, Program, and Activity: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Agency, program, and activity | 1959 | 1960 [1] |
|---|---|---|
| **Division of Scientific Personnel and Education—Con.** | | |
| Graduate Fellowships | $7,385 | $8,086 |
| Awards in agricultural sciences | 12 | 11 |
| Awards in biological sciences | 614 | 638 |
| Awards in engineering | 507 | 563 |
| Awards in physical sciences | 2,001 | 2,074 |
| Awards in social sciences | 52 | 59 |
| Teaching assistant awards in social sciences | 19 | 16 |
| Teaching assistant awards in physical sciences | 296 | 317 |
| Teaching assistant awards in engineering | 52 | 70 |
| Teaching assistant awards in biological sciences | 143 | 124 |
| Teaching assistant awards in agricultural sciences | 4 | 7 |
| Cooperative awards in agricultural sciences | 60 | 60 |
| Cooperative awards in biological sciences | 776 | 838 |
| Cooperative awards in engineering | 818 | 947 |
| Cooperative awards in physical sciences | 1,987 | 2,237 |
| Cooperative awards in social sciences | 46 | 124 |
| Inservice Institutes for Teachers | 1,942 | 2,248 |
| Physical science studies for teachers of science and mathematics | 1,023 | 1,337 |
| Multiple science disciplines for teachers of science and mathematics | 806 | 797 |
| Biological studies for teachers of science and mathematics | 112 | 114 |
| Postdoctoral Fellowships | 1,884 | 1,785 |
| Postdoctoral awards in social sciences | 28 | 0 |
| Postdoctoral awards in biological sciences | 342 | 273 |
| Postdoctoral awards in agricultural sciences | 28 | 10 |
| Postdoctoral awards in engineering | 46 | 51 |
| Postdoctoral awards in physical sciences | 324 | 424 |
| Senior awards in social sciences | 17 | 17 |
| Senior awards in physical sciences | 662 | 536 |
| Senior awards in engineering | 17 | 51 |
| Senior awards in biological sciences | 409 | 416 |
| Senior awards in agricultural sciences | 12 | 6 |
| Research Participation Grants | 2,472 | 4,134 |
| Undergraduate participants in general science education | 919 | 32 |
| Undergraduate participants in agricultural science studies | 9 | 22 |
| Undergraduate participants in biological science studies | 298 | 643 |
| Undergraduate participants in physical science studies | 400 | 1,215 |
| Undergraduate participants in social science studies | 0 | 52 |
| Undergraduate participants in engineering studies | 50 | 263 |
| Teacher training in general science education | 0 | 178 |
| Teacher training in physical sciences | 537 | 669 |
| Teacher training in engineering | 56 | 66 |
| Teacher training in biological sciences | 204 | 315 |
| Teacher training in agricultural sciences | 0 | 3 |
| Undergraduate participants in all science areas | 0 | 675 |
| Science Faculty Fellowships | 2,328 | 2,261 |
| Postdoctoral awards for general science study | 8 | 0 |
| Postdoctoral awards in physical sciences | 624 | 389 |
| Graduate awards in physical sciences | 416 | 698 |
| Graduate awards in engineering | 532 | 635 |
| Postdoctoral awards in engineering | 108 | 48 |
| Graduate awards in biological sciences | 224 | 341 |
| Postdoctoral awards in biological sciences | 370 | 119 |
| Graduate awards in agricultural sciences | 31 | 32 |
| Postdoctoral awards in agricultural sciences | 15 | 0 |
| Secondary School Teacher Fellowships | 1,475 | 1,300 |
| Summer awards for general science study | 219 | 120 |
| Summer awards for physical sciences | 994 | 731 |
| Summer awards for biological sciences | 350 | 450 |
| Awards in agricultural sciences | 2 | 0 |
| Special Field Institutes Grants | 233 | 233 |
| Biological science studies for the elementary-secondary level | 0 | 4 |
| Physical science studies in associations | 0 | 4 |
| Graduate studies in physical sciences at various institutions | 20 | 79 |
| Postdoctoral studies in biological sciences | 36 | 28 |
| Graduate studies in social sciences | 15 | 0 |
| Graduate studies in clinical sciences | 7 | 0 |
| Postdoctoral studies in physical sciences at various institutions | 152 | 108 |
| Graduate studies in biological sciences | 3 | 0 |
| Physical science studies for the elementary-secondary level | 0 | 1 |
| **Division of Scientific Personnel and Education—Con.** | | |
| Special Projects in Science Education | $3,800 | $4,035 |
| Science career information | 50 | 111 |
| Science education projects of State academies of science | 459 | 621 |
| Visiting scientists in colleges | 301 | 311 |
| Visiting scientists in secondary schools | 75 | 165 |
| Traveling science libraries | 800 | 496 |
| Traveling science demonstration lectures | 1,599 | 1,025 |
| Science clubs | 79 | 166 |
| Cooperative projects between colleges and high school students | 4 | 53 |
| Public understanding of science | 5 | 351 |
| International science education | 428 | 735 |
| Summer Conferences for Teachers | 260 | 276 |
| Biological studies for college teachers of science and mathematics | 55 | 44 |
| Physical science studies for college teachers of science and mathematics | 177 | 202 |
| Engineering for college teachers of science and mathematics | 28 | 30 |
| Summer Institutes for Teachers | 22,348 | 21,759 |
| Engineering for technical institute faculties | 68 | 101 |
| General science studies for elementary school personnel | 26 | 0 |
| Multiple science disciplines for elementary school personnel | 369 | 130 |
| Physical science studies for elementary school personnel | 76 | 317 |
| Biological science studies for elementary school personnel | 0 | 63 |
| Biological studies for high school and college teachers of science and mathematics | 1,592 | 1,747 |
| Physical science studies for high school and college teachers of science and mathematics | 6,412 | 7,261 |
| Multiple science disciplines for high school and college teachers of science and mathematics | 13,158 | 11,280 |
| General science studies for high school and college teachers of science and mathematics | 490 | 467 |
| Engineering studies for high school and college teachers of science and mathematics | 159 | 276 |
| The history and philosophy of science and mathematics for high school and college teachers | 0 | 118 |
| Summer Science Training for Secondary School Students | 1,616 | 1,936 |
| Agricultural science studies | 25 | 25 |
| Biological science studies | 309 | 406 |
| Engineering studies | 42 | 44 |
| Physical science studies | 936 | 1,039 |
| Social science studies | 0 | 1 |
| Other areas of study | 305 | 421 |
| Supplementary Training for Science Teachers | 473 | 538 |
| Grants to universities for elementary-secondary biological studies | 0 | 74 |
| Grants to associations for graduate engineering studies | 0 | 46 |
| Grants to universities for graduate clinical science studies | 0 | 23 |
| Grants to corporations for elementary-secondary physical science studies | 23 | 25 |
| Grants to universities for graduate biological studies | 46 | 46 |
| Grants to universities for graduate general science education | 113 | 16 |
| Grants to universities for graduate engineering studies | 5 | 0 |
| Grants to universities for physical science studies | 31 | 0 |
| Grants to universities for physical science studies | 72 | 55 |
| Grants to institutions for graduate physical science studies | 174 | 231 |
| Grants to associations for biological science studies | 8 | 5 |
| Grants to museums for physical science studies | 0 | 6 |
| Grants to universities for undergraduate general science education | 0 | 11 |
| **Office of Social Sciences** | | |
| Basic Research Grants | 889 | 2,100 |
| Grants to educational institutions for social science studies | 889 | 2,100 |
| **Office of Civil and Defense Mobilization** | **1,741** | **891** |

See footnotes at end of table.

## Table A-1.—Federal Funds for Education, by Agency, Program, and Activity: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Agency, program, and activity | 1959 | 1960 [1] |
|---|---|---|
| **Training and Education Department** | | |
| Operation of Civil Defense Schools | $529 | $575 |
| Extension schools | 6 | 6 |
| Resident schools—operation | 523 | 533 |
| Resident schools—travel and per diem allowances | | 36 |
| Support of State Training Programs in Civil Defense | 1,212 | 316 |
| Contribution to States | 1,212 | 316 |
| **Small Business Administration** | (7) | (7) |
| **Office of Management and Research Assistance** | | |
| Management Training Courses | (7) | (7) |
| Administrative management courses | (7) | (7) |
| **Tennessee Valley Authority** | 593 | 606 |
| **Division of Agricultural Relations** | | |
| Cooperative Research, Test, and Demonstration Grants | 593 | 606 |
| Agricultural research, tests, and demonstration | 560 | 576 |
| Social science research, tests, and demonstration | 33 | 31 |
| **Veterans' Administration** | 596,335 | 400,771 |
| **Department of Veterans Benefits, Vocational Rehabilitation and Education Service** | | |
| Readjustment Training Program [11] | 566,369 | 371,404 |
| On-the-job training | 12,289 | 5,418 |
| Institutional training on the farm | 26,320 | 14,354 |
| Adult education | 180,334 | 119,035 |
| **Department of Veterans Benefits, etc.—Continued** | | |
| College level training in various fields | $130,895 | $87,800 |
| College level training in social sciences | 11,552 | 8,510 |
| College level training in physical sciences | 16,708 | 11,685 |
| College level training in engineering | 55,597 | 36,368 |
| College level training in education | 36,114 | 25,947 |
| College level training in clinical sciences | 13,436 | 8,368 |
| College level training in biological sciences | 4,453 | 2,901 |
| College level training in agricultural sciences | 6,424 | 3,913 |
| College level training in general studies | 72,249 | 47,106 |
| Vocational Rehabilitation Program [11] | 22,307 | 17,910 |
| On-the-job training | 2,570 | 1,959 |
| Institutional training on the farm | 1,847 | 1,298 |
| Adult education | 9,015 | 8,264 |
| College level training in various fields | 3,173 | 2,222 |
| College level training in social sciences | 272 | 197 |
| College level training in physical sciences | 247 | 153 |
| College level training in engineering | 1,133 | 682 |
| College level training in education | 2,025 | 1,622 |
| College level training in clinical sciences | 511 | 414 |
| College level training in biological sciences | 206 | 117 |
| College level training in agricultural sciences | 164 | 101 |
| College level training in general studies | 1,145 | 880 |
| War Orphans Educational Assistance [11] | 7,660 | 11,457 |
| Adult education | 694 | 1,952 |
| College level training in various fields | 2,211 | 2,974 |
| College level training in clinical sciences | 547 | 752 |
| College level training in social sciences | 214 | 294 |
| College level training in physical sciences | 290 | 410 |
| College level training in engineering | 553 | 752 |
| College level training in education | 1,038 | 1,478 |
| College level training in biological sciences | 71 | 105 |
| College level training in agricultural sciences | 81 | 137 |
| College level training in general studies | 1,960 | 2,603 |

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[1] Includes Office of Education estimates for some programs. See footnote 11.

[2] Estimated by respondents.

[3] Program in operation but actual expenditures began in 1960.

[4] New program in 1960.

[5] Includes awards for first 10 months of fiscal year 1960

[6] Data incomplete.

[7] Data not available.

[8] Includes some State funds.

[9] Payments to be used for roads or schools as determined by each State.

[10] Less than $500.

[11] Office of Education estimate based on data provided by agency concerned.

[12] College housing loans were reported on the basis of funds authorized. Actual loans approved were $155 million in 1959 and $172 million in 1960.

NOTE: Because of rounding, detail may not add to totals.

### Table A-2.—Federal Funds for Research in Educational Institutions, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 |
|---|---|---|
| **Total** [1] | **$344,218** | **$419,793** |
| **Department of Health, Education, and Welfare** | **7,281** | **16,031** |
| Cooperative Research in Education | 2,681 | 3,200 |
| Research and Studies in Language Development, NDEA | 0 | 2,416 |
| Rehabilitation Research and Demonstration Project Grants, OVR | 4,600 | 6,500 |
| Promotion of New Educational Media | 0 | 3,915 |
| **Department of Agriculture** | **30,846** | **30,846** |
| State Agricultural Experiment Stations | 30,846 | 30,846 |
| **Department of Defense** | **207,253** | **246,176** |
| Research and Development Contracts | 207,253 | 246,176 |
| **Department of State** | **2,450** | **2,704** |
| Research Grants, Educational Exchange Program | 2,450 | 2,704 |
| **Atomic Energy Commission** | **39,715** | **50,610** |
| Contract Research | 39,628 | 50,485 |
| Assistance to Schools in Reactor Technology | 33 | 125 |
| Special Schools and Courses | 54 | 0 |
| **National Aeronautics and Space Administration** | **4,976** | **8,420** |
| Research Grants and Contracts | 4,976 | 8,420 |
| **National Science Foundation** | **51,104** | **64,400** |
| Course Content Improvement Grants | 6,030 | 6,000 |
| Basic Research Grants | 45,074 | 58,400 |
| **Tennessee Valley Authority** | **593** | **606** |
| Cooperative Research, Test and Demonstration Grants | 593 | 606 |

[1] Data incomplete. See National Science Foundation's Federal Funds for Science IX, which reports $355.9 million in educational institutions proper and $261.0 million in research centers operated by them for fiscal 1959. Comparable figures for fiscal 1960 reported there are $464.1 million and $381.6 million.

### Table A-3.—Federal Funds for Fellowships, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 |
|---|---|---|
| **Total** | **$36,901** | **$47,070** |
| **Department of Health, Education, and Welfare** | **10,352** | **18,606** |
| NDEA Fellowships | 0 | 2,320 |
| Research and Studies in Language Development, NDEA | 0 | 474 |
| Research Fellowships, NIH | 10,003 | 14,384 |
| Rehabilitation Research Fellowships, OVR | 42 | 103 |
| Fellowships in Programs for the Education of the Mentally Retarded | 0 | 1,000 |
| Training Grants and Fellowships, Institute of Mental Health | 307 | 325 |
| **Department of State** | **12,552** | **13,852** |
| Study Grants, Educational Exchange Program | 12,552 | 13,852 |
| **Atomic Energy Commission** | **925** | **1,180** |
| Fellowships in Biology and Medicine | 499 | 630 |
| Fellowships in Nuclear Science and Engineering | 426 | 550 |
| **National Science Foundation** | **13,072** | **13,432** |
| Graduate Fellowships | 7,385 | 8,086 |
| Postdoctoral Fellowships | 1,884 | 1,785 |
| Science Faculty Fellowships | 2,328 | 2,261 |
| Secondary School Teacher Fellowships | 1,475 | 1,300 |

### Table A-4.—Federal Funds for Traineeships, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 |
|---|---|---|
| **Total** | **$12,752** | **$18,321** |
| **Department of Health, Education, and Welfare** | **11,354** | **16,457** |
| Chaplain Training at St. Elizabeths Hospital | 3 | 6 |
| Education in Public Health Service Hospitals | 5 | 5 |
| Training at the Robert A. Taft Sanitary Engineering Center | 318 | 476 |
| Traineeships for Public Health Personnel and Nurses | 8,495 | 8,807 |
| Training Grants and Traineeships, Cancer Institute | 930 | 994 |
| Training Grants and Traineeships, Institute of Neurological Disease and Blindness | 1,217 | 1,666 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Dieseases | 265 | 358 |
| Resident and Intern Training in the Clinical Sciences at St. Elizabeths Hospital | 121 | 181 |
| Language Development Institutes, NDEA | 0 | 1,658 |
| Counseling and Guidance Institutes, NDEA | 0 | 2,306 |
| **Department of Commerce** | **208** | **324** |
| Training Foreign Census Technicians | 82 | 89 |
| Research and Training in the National Bureau of Standards | 85 | 163 |
| Training Foreign Meteorologists | 41 | 72 |
| **Atomic Energy Commission** | **1,190** | **1,540** |
| Special Schools and Courses | 1,190 | 1,540 |

### Table A-5.—Federal Funds for Training Grants, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 |
|---|---|---|
| **Total** | **$93,885** | **$118,028** |
| **Department of Health, Education, and Welfare** | **54,717** | **76,072** |
| Vocational Education | 1,570 | 1,665 |
| Gallaudet College | 35 | 64 |
| Experimental Training Grants to Medical Schools, NIH | 500 | 500 |
| Research Training Grants, NIH | 5,705 | 11,350 |
| Training Grants and Traineeships, Cancer Institute | 4,979 | 5,610 |
| Training Grants, Heart Institute | 7,232 | 7,791 |
| Training Grants, Institute of Allergy and Infectious Diseases | 1,759 | 3,535 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Diseases | 1,991 | 4,027 |
| Training Grants, Institute of Dental Research | 650 | 1,073 |
| Training Grants and Fellowships, Institute of Mental Health | 19,585 | 22,316 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 4,422 | 5,618 |
| Training State Personnel in Maternal and Child Health Programs | 1,532 | 1,586 |
| NDEA Fellowships: Institutional Grants | 0 | 2,350 |
| Counseling and Guidance Institutes, NDEA | 0 | 1,082 |
| Research and Studies in Language Development, NDEA | 0 | 500 |
| Language Development Institutes, NDEA | 0 | 908 |
| Rehabilitation Training Grants, OVR | 4,757 | 6,097 |
| **Department of Defense** | **405** | **472** |
| Federal Council on Medical Education for National Defense Program | 405 | 472 |
| **Atomic Energy Commission** | **632** | **1,159** |
| School Equipment and Teacher Training | 336 | 759 |
| Assistance to Schools in Reactor Technology | 296 | 400 |
| **National Science Foundation** | **38,131** | **40,325** |
| Academic Year Institutes for Teachers | 8,787 | 9,211 |
| Inservice Institutes for Teachers | 1,942 | 2,248 |
| Research Participation Grants | 2,472 | 4,134 |
| Special Field Institutes Grants | 233 | 223 |
| Summer Conferences for Teachers | 260 | 276 |
| Summer Science Training for Secondary School Students | 1,616 | 1,936 |
| Summer Institutes for Teachers | 22,348 | 21,759 |
| Supplementary Training for Science Teachers | 473 | 538 |

### Table A-6.—Federal Funds for Educational Facilities, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 |
|---|---|---|
| **Total** | **$447,048** | **$722,402** |
| **Department of Health, Education, and Welfare** | **424,967** | **453,706** |
| School Assistance in Federally Affected Areas | 76,192 | 73,000 |
| Improvement in Science, Mathematics and Foreign Language Instruction | 56,000 | 60,000 |
| Gallaudet College | 123 | 325 |
| Howard University: Construction | 286 | 881 |
| Surplus Property, Original Cost | 292,366 | 319,500 |
| **Department of the Interior** | **1,047** | ---------- |
| Alaska School Construction | 1,047 | ---------- |
| **Atomic Energy Commission** | **3,399** | **3,650** |
| School Equipment and Teacher Training | 1,027 | 1,150 |
| Assistance to Schools in Reactor Technology | 109 | 700 |
| Special Schools and Courses | 2,263 | 1,800 |
| **Canal Zone** | **762** | **3,402** |
| Public Schools | 762 | 3,402 |
| **District of Columbia** | **1,293** | ---------- |
| Public Schools | 1,293 | ---------- |
| **Housing and Home Finance Agency** | **0** | **250,000** |
| College Housing Loans [1] | 0 | 250,000 |
| **National Science Foundation** | **15,580** | **11,644** |
| Research Facilities Grants | 15,580 | 11,644 |

[1] Reported on the basis of funds authorized. Actual loans approved were $155 million in 1959 and $172 million in 1960.

### Table A-7.—Federal Funds for Training Military Personnel in Educational Institutions, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 |
|---|---|---|
| **Total** | **$60,277** | **$62,064** |
| **Department of Defense** | **56,153** | **57,819** |
| Professional Training for Army Medical Service Officers | 168 | 208 |
| Education at Civilian Institutions for Army Personnel | 710 | 868 |
| Education at Civilian Institutions for Navy Personnel | 881 | 1,060 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 234 | 237 |
| Off-Duty Education of Active Military Personnel | 12,081 | 12,199 |
| Professional Training for Air Force Medical Officers | 72 | 85 |
| U.S. Air Force Academy | 15,770 | 15,882 |
| U.S. Air Force Institute of Technology Nonresident Training | 3,504 | 4,776 |
| U.S. Military Academy | 12,401 | 12,112 |
| U.S. Naval Academy | 10,332 | 10,392 |
| **Department of the Treasury** | **4,124** | **4,245** |
| U.S. Coast Guard Academy | 4,068 | 4,150 |
| U.S. Coast Guard Officer Specialized Training | 56 | 95 |

### Table A-8.—Federal Funds for Outservice Training of Civilian Employees, by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 |
|---|---|---|
| **Total [1]** | **$4,217** | **$5,557** |
| **Department of Commerce** | **19** | **43** |
| Research and Training in the National Bureau of Standards | 19 | 43 |
| **Department of Defense** | **3,074** | **4,321** |
| Cooperative Work-Study Program for Navy Employees | 429 | 383 |
| Education of Civilian Employees | 2,645 | 3,938 |
| **Departmentof the Treasury** | **1,051** | **1,023** |
| Training Enforcement Personnel of the Internal Revenue Service | 1,051 | 1,023 |
| **Federal Aviation Agency** | **14** | **34** |
| Outservice Training of Employees | 14 | 34 |
| **Federal Deposit Insurance Corporation** | **14** | **16** |
| Employee Training in Bank Examining and Auditing | 14 | 16 |
| **National Aeronautics and Space Administration** | **45** | **120** |
| Ames Research Center Training Program | 13 | 33 |
| Flight Research Center Training Program | 0 | 2 |
| Langley Research Center Training Program | 14 | 33 |
| Lewis Research Center Training Program | 18 | 43 |
| Space Flight Center Training Program | ---------- | 9 |

[1] Data incomplete. All agencies did not report outservice training.

### Table A-9.—Federal Funds for Education in the Agricultural Sciences, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$134,595** | **$120,505** |
| **Postdoctoral Level** | **216** | **189** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 9 | 6 |
| Research Fellowships, NIH | 9 | [3] 6 |
| DEPARTMENT OF STATE[4] | 152 | 168 |
| Research Grants, Educational Exchange Program | 122 | 134 |
| University Teaching Grants, Educational Exchange Program | 30 | 34 |
| NATIONAL SCIENCE FOUNDATION | 55 | 16 |
| Postdoctoral Fellowships | 39 | 16 |
| Science Faculty Fellowships | 15 | 0 |
| **Graduate Level** | **513** | **734** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 0 | 176 |
| Research Fellowships, NIH | 0 | [3] 8 |
| NDEA Fellowships: Institutional Grants | (5) | 85 |
| NDEA Fellowships | (5) | 84 |
| DEPARTMENT OF DEFENSE | 3 | 2 |
| Professional Training for Army Medical Service Officers | 3 | 2 |
| DEPARTMENT OF STATE[4] | 402 | 443 |
| Study Grants, Educational Exchange Program | 402 | 443 |
| NATIONAL SCIENCE FOUNDATION | 108 | 113 |
| Graduate Fellowships | 75 | 79 |
| Research Participation Grants | 0 | 3 |
| Science Faculty Fellowships | 31 | 32 |
| Secondary School Teacher Fellowships | 2 | 0 |
| **Undergraduate Level** | **7,470** | **4,969** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 792 | 795 |
| Instruction in Land-Grant Colleges and Universities[6] | 792 | 795 |
| DEPARTMENT OF DEFENSE | 0 | (7) |
| Professional Training for Army Medical Service Officers | 0 | (7) |
| NATIONAL SCIENCE FOUNDATION | 9 | 22 |
| Research Participation Grants | 9 | 22 |
| VETERANS' ADMINISTRATION[4] | $6,669 | $4,151 |
| Readjustment Training Program[6] | 6,424 | 3,913 |
| Vocational Rehabilitation Program[6] | 164 | 101 |
| War Orphans Educational Assistance[6] | 81 | 137 |
| **Adult Education** | **82,279** | **69,772** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 398 | 405 |
| Vocational Education | 398 | 405 |
| DEPARTMENT OF AGRICULTURE | 53,715 | 53,715 |
| Cooperative Agricultural Extension Program | 53,715 | 53,715 |
| VETERANS' ADMINISTRATION[4] | 28,166 | 15,652 |
| Readjustment Training Program | 26,320 | 14,354 |
| Vocational Rehabilitation Program | 1,847 | 1,298 |
| **Elementary-secondary Level** | **12,625** | **13,325** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 12,600 | 13,300 |
| Vocational Education | 12,600 | 13,300 |
| NATIONAL SCIENCE FOUNDATION | 25 | 25 |
| Summer Science Training for Secondary School Students | 25 | 25 |
| **Other Levels** | **31,492** | **31,516** |
| DEPARTMENT OF AGRICULTURE | 30,846 | 30,846 |
| State Agricultural Experiment Stations | 30,846 | 30,846 |
| DEPARTMENT OF DEFENSE | 1 | 0 |
| Professional Training for Army Medical Service Officers | 1 | 0 |
| DEPARTMENT OF STATE[4] | 86 | 95 |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 27 | 30 |
| Grants for Observation and Consultation, Educational Exchange Program | 59 | 65 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 0 | 0 |
| TENNESSEE VALLEY AUTHORITY | 560 | 576 |
| Cooperative Research, Test, and Demonstration Grants | 560 | 576 |

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[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 4.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Office of Education estimate based on data provided by agency concerned.

[5] Program in operation but actual expenditures began in 1960.

[6] Graduate level included.

[7] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

## Table A-10.—Federal Funds for Education in the Biological Sciences, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$74,924** | **$95,361** |
| **Postdoctoral Level** | **14,625** | **20,130** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 12,998 | 18,785 |
| Research Training Grants, NIH | 1,997 | 3,973 |
| Training Grants and Traineeships, Cancer Institute | 2,536 | 3,165 |
| Training Grants, Heart Institute | 1,664 | 1,819 |
| Training Grants, Institute of Allergy and Infectious Diseases | 384 | 483 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Diseases | 121 | 831 |
| Training Grants, Institute of Dental Research | 238 | 557 |
| Training Grants and Fellowships, Institute of Mental Health | 68 | 63 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 1,523 | [3] 2,072 |
| Research Fellowships, NIH | 4,468 | [3] 5,824 |
| DEPARTMENT OF STATE[4] | 371 | 409 |
| Research Grants, Educational Exchange Program | 297 | 327 |
| University Teaching Grants, Educational Exchange Program | 74 | 82 |
| ATOMIC ENERGY COMMISSION | 99 | 100 |
| Fellowships in Biology and Medicine | 99 | 100 |
| NATIONAL SCIENCE FOUNDATION | 1,157 | 836 |
| Postdoctoral Fellowships | 751 | 689 |
| Science Faculty Fellowships | 370 | 119 |
| Special Field Institutes Grants | 36 | 28 |
| **Graduate Level** | **26,782** | **37,966** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 8,682 | 14,289 |
| Training State and Local Officials in Food and Drug Inspection Techniques | ------- | 3 |
| Howard University: Curriculum | 423 | 435 |
| Experimental Training Grants to Medical Schools, NIH | 500 | 500 |
| Research Training Grants, NIH | 3,708 | 7,378 |
| Training Grants, Institute of Allergy and Infectious Diseases | 558 | 1,458 |
| Training Grants and Fellowships, Institute of Mental Health | 802 | 1,104 |
| Research Fellowships, NIH | 2,691 | [3] 2,841 |
| NDEA Fellowships: Institutional Grants | (5) | 287 |
| NDEA Fellowships | (5) | 283 |
| DEPARTMENT OF DEFENSE | 52 | 48 |
| Professional Training for Army Medical Service Officers | 26 | 21 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 20 | 19 |
| Professional Training for Air Force Medical Officers | 5 | 9 |
| DEPARTMENT OF STATE[4] | 251 | 277 |
| Study Grants, Educational Exchange Program | 251 | 277 |
| ATOMIC ENERGY COMMISSION | 13,670 | 18,548 |
| School Equipment and Teacher Training | 336 | 759 |
| Contract Research | 12,738 | 17,082 |
| Fellowships in Biology and Medicine | 400 | 530 |
| Special Schools and Courses | 196 | 177 |
| NATIONAL SCIENCE FOUNDATION | 4,127 | 4,803 |
| Graduate Fellowships | 1,532 | 1,600 |
| Inservice Institutes for Teachers | 112 | 114 |
| Research Participation Grants | 204 | 315 |
| Science Faculty Fellowships | 224 | 341 |
| Secondary School Teacher Fellowships | 350 | 450 |
| Special Field Institutes Grants | 3 | 4 |
| Summer Conferences for Teachers | $55 | $44 |
| Summer Institutes for Teachers | 1,592 | 1,810 |
| Supplementary Training for Science Teachers | 55 | 125 |
| **Undergraduate Level** | **7,718** | **6,621** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 1,653 | 1,651 |
| Instruction in Land-Grant Colleges and Universities[6] | 1,342 | 1,350 |
| Howard University: Curriculum[6] | 178 | 176 |
| Training Grants and Traineeships, Cancer Institute | 133 | 125 |
| DEPARTMENT OF DEFENSE | 6 | 8 |
| Professional Training for Army Medical Service Officers | 5 | 6 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 1 | 2 |
| ATOMIC ENERGY COMMISSION | 1,031 | 1,195 |
| School Equipment and Teacher Training | 1,031 | 1,160 |
| Special Schools and Courses | 0 | 35 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | (7) |
| Space Flight Center Training Program | 0 | (7) |
| NATIONAL SCIENCE FOUNDATION | 298 | 643 |
| Research Participation Grants | 298 | 643 |
| VETERANS' ADMINISTRATION[4] | 4,730 | 3,123 |
| Readjustment Training Program[6] | 4,453 | 2,901 |
| Vocational Rehabilitation Program[6] | 206 | 117 |
| War Orphans Educational Assistance[6] | 71 | 105 |
| **Adult Education** | **769** | **643** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 769 | 643 |
| Training for State Public Health Personnel at the Communicable Disease Center | 769 | 643 |
| **Elementary-Secondary Level** | **309** | **406** |
| NATIONAL SCIENCE FOUNDATION | 309 | 406 |
| Summer Science Training for Secondary School Students | 309 | 406 |
| **Other Levels** | **24,721** | **29,596** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 18 | 20 |
| Howard University: Staff Expenses | 18 | 20 |
| DEPARTMENT OF DEFENSE | 1 | (7) |
| Professional Training for Army Medical Service Officers | 1 | (7) |
| DEPARTMENT OF STATE[4] | 19 | 21 |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 10 | 11 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 10 | 11 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 167 | 820 |
| Research Grants and Contracts | 167 | 820 |
| NATIONAL SCIENCE FOUNDATION | 24,517 | 28,734 |
| Basic Research Grants | 20,462 | 24,500 |
| Course Content Improvement Grants | 785 | 1,390 |
| Research Facilities Grants | 3,270 | 2,844 |

[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 4.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Office of Education estimate based on data provided by agency concerned.

[5] Program in operation but actual expenditures began in 1960.

[6] Includes graduate level.

Less than $500.

NOTE: Because of rounding, detail may not add to totals.

### Table A-11.—Federal Funds for Education in the Clinical Sciences, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$59,344** | **$69,977** |
| **Postdoctoral Level** | **20,138** | **24,938** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 19,616 | 24,365 |
| Training Grants and Traineeships, Cancer Institute | 797 | 868 |
| Training Grants, Heart Institute | 2,714 | 3,060 |
| Training Grants, Institute of Allergy and Infectious Diseases | 640 | 1,203 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Diseases | 2,135 | 3,554 |
| Training Grants, Institute of Dental Research | 412 | 516 |
| Training Grants and Fellowships, Institute of Mental Health | 6,763 | 8,076 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 4,116 | [3] 5,212 |
| Research Fellowships, NIH | 1,917 | [3] 1,695 |
| Resident and Intern Training in the Clinical Sciences at St. Elizabeths Hospital | [1] 121 | 181 |
| DEPARTMENT OF DEFENSE | 36 | 36 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 36 | 36 |
| DEPARTMENT OF STATE[4] | 487 | 537 |
| Research Grants, Educational Exchange Program | 417 | 460 |
| University Teaching Grants, Educational Exchange Program | 70 | 77 |
| **Graduate Level** | **15,123** | **16,433** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 14,216 | 15,402 |
| Howard University: Curriculum | 574 | 630 |
| Education in Public Health Service Hospitals | 5 | 5 |
| Training Grants and Traineeships Cancer Institute | 2,444 | 2,445 |
| Training Grants, Heart Institute | 2,390 | 2,392 |
| Training Grants, Institute of Allergy and Infectious Diseases | 176 | 391 |
| Training Grants and Fellowships, Institute of Mental Health | 6,886 | 7,639 |
| Research Fellowships, NIH | 27 | [3] 43 |
| Nursing Education at St. Elizabeths Hospital | (5) | (5) |
| Resident and Intern Training in the Clinical Sciences at St. Elizabeths Hospital | (5) | (5) |
| Training State Personnel in Maternal and Child Health Programs[6] | 1,532 | 1,586 |
| Rehabilitation Training Grants, OVR | 183 | 271 |
| DEPARTMENT OF DEFENSE | 59 | 80 |
| Professional Training for Army Medical Service Officers | 2 | 9 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 7 | 12 |
| Professional Training for Air Force Medical Officers | 49 | 59 |
| DEPARTMENT OF STATE[4] | 841 | 928 |
| Study Grants, Educational Exchange Program | 841 | 928 |
| NATIONAL SCIENCE FOUNDATION | $7 | $23 |
| Special Field Institutes Grants | 7 | 0 |
| Supplementary Training for Science Teachers | 0 | 23 |
| **Undergraduate Level** | **15,722** | **10,828** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 1,098 | 1,164 |
| Education in Public Health Service Hospitals | 206 | 243 |
| Training Grants and Fellowships, Institute of Mental Health | 893 | 921 |
| Nursing Education at St. Elizabeths Hospital | (5) | (5) |
| DEPARTMENT OF DEFENSE | 130 | 131 |
| Professional Training for Army Medical Service Officers | 3 | 3 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 127 | 128 |
| VETERANS' ADMINISTRATION[4] | 14,494 | 9,534 |
| Readjustment Training Program[7] | 13,436 | 8,368 |
| Vocational Rehabilitation Program[7] | 511 | 414 |
| War Orphans Educational Assistance[7] | 547 | 752 |
| **Elementary-Secondary Level** | **283** | **301** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 283 | 301 |
| Training of Indian Health Personnel | 283 | 301 |
| **Other Levels** | **8,078** | **8,477** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 7,465 | 7,773 |
| Howard University: Staff Expenses | 30 | 30 |
| Traineeships for Public Health Personnel and Nurses | 5,935 | 5,733 |
| Rehabilitation Training Grants, OVR | 1,501 | 2,009 |
| DEPARTMENT OF DEFENSE | 421 | 493 |
| Professional Training for Army Medical Service Officers | 16 | 21 |
| Federal Council on Medical Education for National Defense Program | 405 | 473 |
| DEPARTMENT OF STATE[4] | 191 | 211 |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 111 | 123 |
| Grants for Observation and Consultation, Educational Exchange Program | 76 | 84 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 4 | |

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[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 4.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Office of Education estimate based on data provided by agency concerned.

[5] Data not available.

[6] Includes postdoctoral level.

[7] Includes graduate level.

NOTE: Because of rounding, detail may not add to totals.

## Table A-12.—Federal Funds for Education in the Field of Education, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960 [1] |
|---|---|---|
| **Total [2]** | **$79,470** | **$88,836** |
| **Postdoctoral Level** | **451** | **592** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 241 | 360 |
| Training Grants, Heart Institute | 210 | 301 |
| Research Fellowships, NIH | 31 | [3] 59 |
| DEPARTMENT OF STATE [4] | 210 | 232 |
| Research Grants, Educational Exchange Program | 35 | 38 |
| University Teaching Grants, Educational Exchange Program | 175 | 193 |
| **Graduate Level** | **713** | **1,991** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 11 | 1,220 |
| Fellowships in Programs for the Education of the Mentally Retarded | (5) | 1,000 |
| Research Fellowships, NIH | 11 | [3] 1 |
| NDEA Fellowships: Institutional Grants | (6) | 110 |
| NDEA Fellowships | (6) | 109 |
| DEPARTMENT OF DEFENSE | 13 | 9 |
| Professional Training for Army Medical Service Officers | 13 | 9 |
| DEPARTMENT OF STATE [4] | 690 | 762 |
| Study Grants, Educational Exchange Program | 690 | 762 |
| **Undergraduate Level** | **40,928** | **30,890** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 1,750 | 1,842 |
| Instruction in Land-Grant Colleges and Universities [7] | 27 | 27 |
| Vocational Education | 1,570 | 1,665 |
| Howard University: Curriculum [7] | $153 | $150 |
| Occupational Therapy Intern Training at St. Elizabeths Hospital | (8) | (8) |
| DEPARTMENT OF DEFENSE | 1 | 0 |
| Professional Training for Army Medical Service Officers | 1 | 0 |
| VETERANS' ADMINISTRATION [4] | 39,177 | 29,048 |
| Readjustment Training Program [7] | 36,114 | 25,947 |
| Vocational Rehabilitation Program [7] | 2,025 | 1,622 |
| War Orphans Educational Assistance [7] | 1,038 | 1,478 |
| **Other levels** | **37,377** | **55,363** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 2,681 | 7,115 |
| Cooperative Research in Education | 2,681 | 3,200 |
| Promotion of New Educational Media | (6) | 3,915 |
| Training in Psychotherapy at St. Elizabeths Hospital | (8) | (8) |
| Volunteer Training at St. Elizabeths Hospital | (8) | (8) |
| DEPARTMENT OF DEFENSE | (9) | 1 |
| Professional Training for Army Medical Service Officers | (9) | 1 |
| DEPARTMENT OF STATE | 34,696 | 48,247 |
| Grants for Advisory Services and Technical Training, Educational Exchange Program [4] | 400 | 441 |
| Grants for Observation and Consultation, Educational Exchange Program [4] | 507 | 560 |
| Teaching and Teacher Training Grants, Educational Exchange Program [4] | 2,568 | 2,834 |
| Cooperative Educational Activities in Other Countries | 31,221 | 44,412 |

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[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 4.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Office of Education estimate based on data provided by agency concerned.

[5] New program for 1960.

[6] Program in operation but actual expenditures began in 1960.

[7] Includes graduate level.

[8] Data not available.

[9] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

## Table A-13.—Federal Funds for Education in the Field of Engineering, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$78,105** | **$62,429** |
| **Postdoctoral Level** | **404** | **469** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 37 | 103 |
| Training Grants, Heart Institute | 36 | 99 |
| Research Fellowships, NIH | 1 | [3] 3 |
| DEPARTMENT OF STATE[4] | 197 | 217 |
| Research Grants, Educational Exchange Program | 105 | 116 |
| University Teaching Grants, Educational Exchange Program | 92 | 101 |
| NATIONAL SCIENCE FOUNDATION | 171 | 149 |
| Postdoctoral Fellowships | 64 | 102 |
| Science Faculty Fellowships | 108 | 48 |
| **Graduate Level** | **4,818** | **5,825** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 16 | 295 |
| Research Fellowships, NIH | 16 | [3] 19 |
| NDEA Fellowships: Institutional Grants | (5) | 139 |
| NDEA Fellowships | (5) | 137 |
| DEPARTMENT OF DEFENSE | 812 | 789 |
| Education at Civilian Institutions for Army Personnel | 233 | 143 |
| Education at Civilian Institutions for Navy Personnel | 377 | 375 |
| Medical Training for Navy Personnel in Civilian Medical Schools | (6) | (6) |
| U.S. Air Force Institute of Technology—Nonresident Training | 202 | 271 |
| DEPARTMENT OF STATE[4] | 1,456 | 1,607 |
| Study Grants, Educational Exchange Program | 1,456 | 1,607 |
| DEPARTMENT OF THE TREASURY | 48 | 82 |
| U.S. Coast Guard Officer Specialized Training | 48 | 82 |
| ATOMIC ENERGY COMMISSION | 228 | 240 |
| Special Schools and Courses | 228 | 240 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 34 | 78 |
| Ames Research Center Training Program | 13 | 32 |
| Flight Research Center Training Program | 0 | 1 |
| Langley Research Center Training Program | 13 | 25 |
| Lewis Research Center Training Program | 8 | 20 |
| Space Flight Center Training Program | -------- | 1 |
| NATIONAL SCIENCE FOUNDATION | 2,224 | 2,735 |
| Graduate Fellowships | 1,377 | 1,580 |
| Research Participation Grants | 56 | 66 |
| Science Faculty Fellowships | 532 | 635 |
| Summer Conferences for Teachers | 28 | 30 |
| Summer Institutes for Teachers | 227 | 377 |
| Supplementary Training for Science Teachers | 5 | 46 |
| **Undergraduate Level** | **62,553** | **44,072** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | $1,605 | $1,617 |
| Instruction in Land-Grant Colleges and Universities[7] | 1,416 | 1,415 |
| Howard University: Curriculum | 189 | 202 |
| DEPARTMENT OF COMMERCE | 3,266 | 4,016 |
| Merchant Marine Schools | 3,266 | 4,016 |
| DEPARTMENT OF DEFENSE | 348 | 375 |
| Education at Civilian Institutions for Army Personnel | 98 | 118 |
| U.S. Air Force Institute of Technology—Nonresident Training | 250 | 257 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | (6) |
| Space Flight Center Training Program | 0 | (6) |
| NATIONAL SCIENCE FOUNDATION | 50 | 263 |
| Research Participation Grants | 50 | 263 |
| VETERANS' ADMINISTRATION[4] | 57,284 | 37,801 |
| Readjustment Training Program[7] | 55,597 | 36,368 |
| Vocational Rehabilitation Program[7] | 1,133 | 682 |
| War Orphans Educational Assistance[7] | 553 | 752 |
| **Adult Education** | **1,200** | **1,250** |
| DEPARTMENT OF THE INTERIOR | 1,200 | 1,250 |
| Safety Training for Mine Workmen | 1,200 | 1,250 |
| **Elementary-Secondary Level** | **42** | **44** |
| NATIONAL SCIENCE FOUNDATION | 42 | 44 |
| Summer Science Training for Secondary School Students | 42 | 44 |
| **Other Levels** | **9,088** | **10,769** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 20 | 25 |
| Howard University: Staff Expenses | 20 | 25 |
| DEPARTMENT OF STATE[4] | 48 | 53 |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 12 | 13 |
| Grants for Observation and Consultation, Educational Exchange Program | 32 | 35 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 4 | 4 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 2,659 | 2,300 |
| Lewis Research Center Training Program | 0 | (6) |
| Research Grants and Contracts | 2,659 | 2,300 |
| NATIONAL SCIENCE FOUNDATION | 6,362 | 8,391 |
| Basic Research Grants | 4,312 | 6,100 |
| Course Content Improvement Grants | 50 | 291 |
| Research Facilities Grants | 2,000 | 2,000 |

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[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 4.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Office of Education estimate based on data provided by agency concerned.

[5] Program in operation but actual expenditures began in 1960.

[6] Less than $500.

[7] Includes graduate level.

NOTE: Because of rounding, detail may not add to totals.

## Table A-14.—Federal Funds for Education in the Physical Sciences, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency and program | 1959 | 1960 [1] |
|---|---|---|
| **Total [2]** | **$110,823** | **$126,139** |
| **Postdoctoral Level** | **3,113** | **3,094** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 247 | 346 |
| Research Fellowships, NIH | 247 | [3] 346 |
| DEPARTMENT OF COMMERCE | 93 | 178 |
| Research and Training in the National Bureau of Standards | [1] 93 | 178 |
| DEPARTMENT OF DEFENSE | 10 | 8 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 10 | 8 |
| DEPARTMENT OF STATE [4] | 1,001 | 1,104 |
| Research Grants, Educational Exchange Program | 747 | 825 |
| University Teaching Grants, Educational Exchange Program | 253 | 279 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | 1 |
| Lewis Research Center Training Program | 0 | 1 |
| NATIONAL SCIENCE FOUNDATION | 1,762 | 1,457 |
| Postdoctoral Fellowships | 986 | 961 |
| Science Faculty Fellowships | 624 | 389 |
| Special Field Institutes Grants | 152 | 108 |
| **Graduate Level** | **48,666** | **60,676** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 164 | 1,378 |
| Training State and Local Officials in Food and Drug Inspection Techniques | ---------- | 3 |
| Research Fellowships, NIH | 164 | [3] 330 |
| NDEA Fellowships: Institutional Grants | (5) | 526 |
| NDEA Fellowships | (5) | 520 |
| DEPARTMENT OF COMMERCE | 10 | 24 |
| Research and Training in the National Bureau of Standards | 10 | 24 |
| DEPARTMENT OF DEFENSE | 117 | 249 |
| Education at Civilian Institutions for Army Personnel | 111 | 244 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 7 | 4 |
| DEPARTMENT OF STATE [4] | 1,192 | 1,316 |
| Study Grants, Educational Exchange Program | 1,192 | 1,316 |
| DEPARTMENT OF THE TREASURY | 2 | (6) |
| U.S. Coast Guard Officer Specialized Training | 2 | (6) |
| ATOMIC ENERGY COMMISSION | 31,058 | 38,356 |
| Assistance to Schools in Reactor Technology | 438 | 1,225 |
| Fellowships in Nuclear Science and Engineering | 426 | 550 |
| Special Schools and Courses | 3,304 | 3,178 |
| Contract Research | 26,890 | 33,403 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 12 | 35 |
| Ames Research Center Training Program | (6) | 1 |
| Flight Research Center Training Program | 0 | 1 |
| Langley Research Center Training Program | 1 | 6 |
| Lewis Research Center Training Program | 10 | 20 |
| Space Flight Center Training Program | ---------- | 7 |
| NATIONAL SCIENCE FOUNDATION | 16,112 | 19,318 |
| Academic Year Institutes for Teachers | 1,873 | 3,077 |
| Graduate Fellowships | 4,284 | 4,628 |
| Inservice Institutes for Teachers | 1,023 | 1,337 |
| Research Participation Grants | $537 | $669 |
| Science Faculty Fellowships | 416 | 698 |
| Secondary School Teacher Fellowships | 994 | 731 |
| Special Field Institutes Grants | 20 | 80 |
| Summer Conferences for Teachers | 177 | 202 |
| Summer Institutes for Teachers | 6,488 | 7,578 |
| Supplementary Training fo[illegible]ce Teachers | 300 | 317 |
| **Undergraduate Level** | **18,400** | **14,246** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 741 | 697 |
| Instruction in Land-Grant Colleges and Universities [7] | 446 | 440 |
| Howard University: Curriculum [7] | 295 | 257 |
| DEPARTMENT OF COMMERCE | 1 | 5 |
| Research and Training in the National Bureau of Standards | 1 | 5 |
| DEPARTMENT OF DEFENSE | 13 | 78 |
| Education at Civilian Institutions for Army Personnel | 8 | 72 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 6 | 5 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | ---------- | (6) |
| Space Flight Center Training Program | ---------- | (6) |
| NATIONAL SCIENCE FOUNDATION | 400 | 1,218 |
| Research Participation Grants | 400 | 1,215 |
| Special Field Institutes Grants | 0 | 4 |
| VETERANS' ADMINISTRATION [4] | 17,245 | 12,248 |
| Readjustment Training Program [7] | 16,708 | 11,685 |
| Vocational Rehabilitation Program [7] | 247 | 153 |
| War Orphans Educational Assistance [7] | 290 | 410 |
| **Adult Education** | **2,746** | **5,000** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 2,746 | 5,000 |
| Vocational Education | 2,746 | 5,000 |
| **Elementary-Secondary Level** | **936** | **1,039** |
| NATIONAL SCIENCE FOUNDATION | 936 | 1,039 |
| Summer Science Training for Secondary School Students | 936 | 1,039 |
| **Other Levels** | **36,962** | **42,084** |
| DEPARTMENT OF COMMERCE | 41 | 72 |
| Training Foreign Meteorologists | 41 | 72 |
| DEPARTMENT OF STATE [4] | 144 | 158 |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 13 | 15 |
| Grants for Observation and Consultation, Educational Exchange Program | 13 | 15 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 117 | 129 |
| ATOMIC ENERGY COMMISSION | 3 | 12 |
| Special Schools and Courses | 3 | 12 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 2,150 | 5,301 |
| Lewis Research Center Training Program | 0 | 1 |
| Research Grants and Contracts | 2,150 | 5,300 |
| NATIONAL SCIENCE FOUNDATION | 34,624 | 36,540 |
| Basic Research Grants | 19,412 | 25,700 |
| Course Content Improvement Grants | 4,902 | 4,040 |
| Research Facilities Grants | 10,311 | 6,800 |

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[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 4.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Office of Education estimate based on data provided by agency concerned.

[5] Program in operation but actual expenditures began in 1960.

[6] Less than $500.

[7] Includes graduate level.

NOTE: Because of rounding, detail may not add to totals.

## Table A-15.—Federal Funds for Education in the Social Sciences, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$26,784** | **$28,396** |
| **Postdoctoral Level** | **1,219** | **1,302** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 62 | 57 |
| Research Fellowships, NIH | 62 | [3] 57 |
| DEPARTMENT OF STATE[4] | 1,112 | 1,228 |
| Research Grants, Educational Exchange Program | 398 | 440 |
| University Teaching Grants, Educational Exchange Program | 714 | 788 |
| NATIONAL SCIENCE FOUNDATION | 45 | 17 |
| Postdoctoral Fellowships | 45 | 17 |
| **Graduate Level** | **9,179** | **12,155** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 5,710 | 8,275 |
| Training Grants and Fellowships, Institute of Mental Health | 3,650 | 4,292 |
| Research Fellowships, NIH | 111 | [3] 221 |
| NDEA Fellowships: Institutional Grants | (5) | 620 |
| NDEA Fellowships | (5) | 612 |
| Rehabilitation Training Grants, OVR | 1,950 | 2,529 |
| DEPARTMENT OF COMMERCE | 82 | 89 |
| Training Foreign Census Technicians | 82 | 89 |
| DEPARTMENT OF DEFENSE | 4 | 5 |
| Professional Training for Army Medical Service Officers | 4 | 5 |
| DEPARTMENT OF STATE[4] | 3,251 | 3,588 |
| Study Grants, Educational Exchange Program | 3,251 | 3,588 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | ---------- | (6) |
| Space Flight Center Training Program | ---------- | (6) |
| NATIONAL SCIENCE FOUNDATION | 133 | 198 |
| Graduate Fellowships | 117 | 198 |
| Special Field Institutes Grants | 15 | 0 |
| **Undergraduate Level** | **$12,539** | **$9,568** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 499 | 511 |
| Instruction in Land-Grant Colleges and Universities[7] | 371 | 375 |
| Howard University: Curriculum[7] | 126 | 131 |
| Training Grants and Fellowships. Institute of Mental Health | 2 | 5 |
| DEPARTMENT OF DEFENSE | 1 | 4 |
| Professional Training for Army Medical Service Officers | 1 | 3 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 1 | 1 |
| NATIONAL SCIENCE FOUNDATION | 0 | 52 |
| Research Participation Grants | 0 | 52 |
| VETERANS' ADMINISTRATION[4] | 12,038 | 9,001 |
| Readjustment Training Program[7] | 11,552 | 8,510 |
| Vocational Rehabilitation Program[7] | 272 | 197 |
| War Orphans Educational Assistance[7] | 214 | 294 |
| **Elementary-Secondary Level** | **0** | **1** |
| NATIONAL SCIENCE FOUNDATION | 0 | 1 |
| Summer Science Training for Secondary School Students | 0 | 1 |
| **Other Levels** | **3,847** | **5,370** |
| DEPARTMENT OF STATE[4] | 2,824 | 3,117 |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 1,008 | 1,113 |
| Grants for Observation and Consultation, Educational Exchange Program | 1,364 | 1,505 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 452 | 499 |
| NATIONAL SCIENCE FOUNDATION | 991 | 2,222 |
| Basic Research Grants | 889 | 2,100 |
| Course Content Improvement Grants | 101 | 122 |
| TENNESSEE VALLEY AUTHORITY | 33 | 31 |
| Cooperative Research, Test, and Demonstration Grants | 33 | 31 |

[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 4.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Office of Education estimate based on data provided by agency concerned.

[5] Program in operation but actual expenditures began in 1960.

[6] Less than $500.

[7] Includes graduate level.

NOTE: Because of rounding, detail may not add to totals.

## Table A-16.—Federal Funds for Education in Other Fields of Study, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$484,934** | **$500,524** |
| **Postdoctoral Level** | **1,314** | **3,099** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 367 | 2,063 |
| Training Grants, Heart Institute | 218 | 120 |
| Research Fellowships, NIH | 149 | [3] 1,943 |
| DEPARTMENT OF DEFENSE | 1 | (4) |
| Medical Training for Navy Personnel in Civilian Medical Schools | 1 | (4) |
| DEPARTMENT OF STATE[5] | 938 | 1,035 |
| Research Grants, Educational Exchange Program | 329 | 363 |
| University Teaching Grants, Educational Exchange Program | 609 | 672 |
| NATIONAL SCIENCE FOUNDATION | $8 | 0 |
| Science Faculty Fellowships | 8 | 0 |
| **Graduate Level** | **32,130** | **$37,716** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 4,984 | 12,931 |
| Howard University: Curriculum | 158 | 268 |
| Rehabilitation Research Fellowships, OVR | 42 | 103 |
| Training at the Robert A. Taft Sanitary Engineering Center | 318 | 476 |
| Research Fellowships, NIH | 101 | [3] 918 |
| Traineeships for Public Health Personnel and Nurses | 2,561 | 3,074 |
| Chaplain training at St. Elizabeths Hospital | [4] 32 | [4] 65 |
| Training State Personnel in Child Welfare Agencies | 1,133 | (7) |
| Training State Personnel in Public Assistance Agencies | [4] 669 | (7) |
| NDEA Fellowships: Institutional Grants | (8) | 583 |
| NDEA Fellowships | (8) | 575 |
| Counseling and Guidance Institutes, NDEA | (8) | 3,388 |

See footnotes at end of table.

### Table A-16.—Federal Funds for Education in Other Fields of Study, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960 [1] |
|---|---|---|
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE—CON. | | |
| Research and Studies in Language Development, NDEA | (9) | $ 974 |
| Language Development Institutes, NDEA | (9) | 2,566 |
| DEPARTMENT OF DEFENSE | $652 | 573 |
| Professional Training for Army Medical Service Officers | 20 | 25 |
| Education at Civilian Institutions for Army Personnel | 251 | 85 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 1 | 1 |
| Professional Training for Air Force Medical Officers | 17 | 17 |
| U.S. Air Force Institute of Technology—Nonresident Training | 363 | 445 |
| DEPARTMENT OF STATE [6] | 4,468 | 4,931 |
| Study Grants, Educational Exchange Program | 4,468 | 4,931 |
| DEPARTMENT OF THE TREASURY | 6 | 12 |
| U.S. Coast Guard Officer Specialized Training | 6 | 12 |
| FEDERAL DEPOSIT INSURANCE CORPORATION | 14 | 16 |
| Employee Training in Bank Examining and Auditing | 14 | 16 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | 2 |
| Langley Research Center Training Program | 0 | 1 |
| Space Flight Center Training Program | 0 | 1 |
| NATIONAL SCIENCE FOUNDATION | 22,004 | 19,250 |
| Academic Year Institutes for Teachers | 6,914 | 6,134 |
| Inservice Institutes for Teachers | 806 | 797 |
| Research Participation Grants | 0 | 178 |
| Secondary School Teacher Fellowships | 129 | 120 |
| Summer Institutes for Teachers | 14,043 | 11,995 |
| Supplementary Training for Science Teachers | 113 | 27 |
| **Undergraduate Level** | **139,335** | **96,498** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 1,227 | 1,275 |
| Instruction in Land. Grant Colleges and Universities [10] | 657 | 650 |
| Howard University: Curriculum [10] | 570 | 625 |
| DEPARTMENT OF DEFENSE | 610 | 1,209 |
| Professional Training for Army Medical Service Officers | 1 | 4 |
| Education at Civilian Institutions for Army Personnel | 10 | 205 |
| Education at Civilian Institutions for Navy Personnel | 293 | 520 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 17 | 20 |
| U.S. Air Force Institute of Technology—Nonresident Training | 289 | 459 |
| NATIONAL SCIENCE FOUNDATION | 1,219 | 1,018 |
| Research Participation Grants | 919 | 707 |
| Special Projects in Science Education | 301 | 311 |
| VETERANS' ADMINISTRATION [5] | 136,278 | 92,996 |
| Readjustment Training Program [10] | 130,895 | 87,800 |
| Vocational Rehabilitation Program [10] | 3,173 | 2,222 |
| War Orphans Educational Assistance [10] | 2,211 | 2,974 |
| **Adult Education** | **12,817** | **14,229** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 8,976 | 10,940 |
| Civil Defense Adult Education | --------- | 557 |
| Vocational Education | 7,703 | 8,951 |
| Grants to States for Public Health Personnel | 1,272 | 1,423 |
| Training State Personnel in Public Assistance Agencies | --------- | 10 |
| DEPARTMENT OF JUSTICE | 234 | 231 |
| FBI National Academy | 9 | 6 |
| Police Training Schools | 225 | 225 |
| CANAL ZONE | $29 | $30 |
| Apprentice School, Panama Canal Company | 29 | 30 |
| FEDERAL AVIATION AGENCY | 1,008 | 1,069 |
| Technical Training in Aviation for Foreign Nationals | 994 | 1,034 |
| Outservice Training of Employees | 14 | 34 |
| SMALL BUSINESS ADMINISTRATION | (7) | (7) |
| Management Training Courses | (7) | (7) |
| VETERANS' ADMINISTRATION [5] | 2,570 | 1,959 |
| Vocational Rehabilitation Program | 2,570 | 1,959 |
| **Elementary-Secondary Level** | **75,695** | **79,847** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 72,374 | 76,900 |
| Improvement in Science, Mathematics and Foreign Language Instruction | 56,000 | 60,000 |
| Vocational Education | 16,374 | 16,900 |
| NATIONAL SCIENCE FOUNDATION | 3,321 | 2,947 |
| Special Projects in Science Education | 3,016 | 2,527 |
| Summer Science Training for Secondary School Students | 305 | 421 |
| **Other Levels** | **223,644** | **269,136** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 5,811 | 10,282 |
| Howard University: Staff Expenses | 88 | 78 |
| Rehabilitation Research and Demonstration Project Grants, OVR | 4,600 | 6,500 |
| Research and Studies in Language Development, NDEA | (9) | 2,416 |
| Rehabilitation Training Grants, OVR | 1,123 | 1,288 |
| DEPARTMENT OF DEFENSE | 210,154 | 250,001 |
| Professional Training for Army Medical Service Officers | 72 | 99 |
| Cooperative Work-Study Program for Navy Employees | 429 | 383 |
| Research and Development Contracts | 207,253 | 246,176 |
| U.S. Air Force Institute of Technology—Nonresident Training | 2,400 | 3,344 |
| DEPARTMENT OF LABOR | 3,167 | 3,400 |
| Training in Labor and Allied Fields for Foreign Visitors | 3,167 | 3,400 |
| DEPARTMENT OF STATE [6] | 2,786 | 3,075 |
| Grants for Advisory Services and Technical Training, Educational Exchange Program | 660 | 729 |
| Grants for Observation and Consultation, Educational Exchange Program | 1,128 | 1,245 |
| Teaching and Teacher Training Grants, Educational Exchange Program | 997 | 1,101 |
| DEPARTMENT OF THE TREASURY | 1,051 | 1,023 |
| Training Enforcement Personnel of the Internal Revenue Service | 1,051 | 1,023 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | 2 |
| Flight Research Center Training Program | 0 | (4) |
| Lewis Research Center Training Program | 0 | 2 |
| NATIONAL SCIENCE FOUNDATION | 675 | 1,353 |
| Course Content Improvement Grants | 191 | 156 |
| Special Projects in Science Education | 484 | 1,197 |

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[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 5.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Less than $500.

[5] Office of Education estimate based on data provided by agency concerned.

[6] Data incomplete.

[7] Data not available.

[8] Includes some State funds.

[9] Program in operation but actual expenditures began in 1960.

[10] Includes graduate level.

NOTE: Because of rounding, detail may not add to totals.

## Table A-17.—Federal Funds for General Education, by Academic Level, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total**[2] | **$1,014,461** | **$1,254,587** |
| **Postdoctoral Level** | **0** | **60** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 0 | 60 |
| Research Fellowships, NIH | 0 | [3] 60 |
| **Graduate Level** | **35** | **74** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 35 | 74 |
| Gallaudet College | 35 | 64 |
| Research Fellowships, NIH | 0 | [3] 10 |
| **Undergraduate Level** | **122,567** | **107,529** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 676 | 10,290 |
| Gallaudet College | 676 | 671 |
| Student Loan Fund, NDEA[4] | (5) | 9,619 |
| DEPARTMENT OF DEFENSE | 42,469 | 42,499 |
| Education at Civilian Institutions for Navy Personnel | 3,966 | 4,113 |
| U.S. Air Force Academy | 15,770 | 15,882 |
| U.S. Military Academy | 12,401 | 12,112 |
| U.S. Naval Academy | 10,332 | 10,392 |
| DEPARTMENT OF THE TREASURY | 4,068 | 4,150 |
| U.S. Coast Guard Academy | 4,068 | 4,150 |
| VETERANS' ADMINISTRATION[6] | 75,354 | 50,589 |
| Readjustment Training Program[7] | 72,249 | 47,106 |
| Vocational Rehabilitation Program[7] | 1,145 | 880 |
| War Orphans Educational Assistance[7] | 1,960 | 2,603 |
| **Adult Education** | **197,844** | **138,436** |
| DEPARTMENT OF THE INTERIOR | 2,610 | 3,765 |
| Public Schools for Indians | 2,610 | 3,765 |
| DEPARTMENT OF JUSTICE | 1,182 | 1,373 |
| Education and Vocational Training in Penal Institutions | 1,182 | 1,373 |
| DEPARTMENT OF LABOR | 4,009 | 4,047 |
| Promotion of Apprenticeship and Training | 4,009 | 4,047 |
| VETERANS' ADMINISTRATION[6] | 190,043 | 129,251 |
| Readjustment Training Program | 180,334 | 119,035 |
| Vocational Rehabilitation Program | 9,015 | 8,264 |
| War Orphans Educational Assistance | 694 | 1,952 |
| **Elementary-Secondary Level** | **383,285** | **418,443** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 215,137 | 233,578 |
| School Assistance in Federally Affected Areas | 215,066 | 233,500 |
| Vocational Education | 8 | 5 |
| Gallaudet College | 47 | 56 |
| Education in Public Health Service Hospitals | 16 | 17 |
| DEPARTMENT OF AGRICULTURE | $22,880 | $30,243 |
| School Support From National Forest Revenue[8] | 22,322 | 29,782 |
| School Support From Submarginal Land Revenue[8] | 558 | 460 |
| DEPARTMENT OF DEFENSE | 29,802 | 33,801 |
| Education of Dependents of Military Personnel | 29,699 | 33,700 |
| Public Schools in Northern Mariana—Saipan District | 103 | 101 |
| DEPARTMENT OF THE INTERIOR | 97,739 | 100,879 |
| Public Schools in the Pribilof Islands | 51 | 51 |
| Public Schools for Indians | 44,711 | 46,832 |
| School Support from Public Land Revenue[8] | 51,276 | 53,250 |
| Education of Dependents of National Park Service Employees | 38 | 59 |
| Public Schools in the Trust Territory of the Pacific Islands[6] | 399 | 419 |
| Public Schools in American Samoa[6] | 218 | 268 |
| Alaska School Construction | 1,047 | 0 |
| DEPARTMENT OF THE TREASURY | 37 | 37 |
| Education of Dependents of U.S. Coast Guard Personnel | 37 | 37 |
| ATOMIC ENERGY COMMISSION | 4,958 | 4,347 |
| Public Schools at AEC Facilities | 4,958 | 4,347 |
| CANAL ZONE | 4,990 | 7,825 |
| Public Schools | 4,990 | 7,825 |
| DISTRICT OF COLUMBIA | 7,742 | 7,734 |
| Public Schools | 7,742 | 7,734 |
| Education in Public Welfare Institutions | (9) | (9) |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | (10) |
| Space Flight Center Training Program | 0 | (10) |
| **Other Levels** | **310,730** | **590,045** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 294,637 | 322,289 |
| American Printing House for the Blind | 410 | 410 |
| Gallaudet College | 123 | 325 |
| Howard University: Construction | 286 | 881 |
| Howard University: Operation | 569 | 575 |
| Howard University: Staff Expenses | 54 | 56 |
| Training Grants and Fellowships, Institute of Mental Health | 828 | 542 |
| Surplus Property, Original Cost | 292,366 | 319,500 |
| DEPARTMENT OF DEFENSE | 14,726 | 16,137 |
| Education of Civilian Employees | 2,645 | 3,938 |
| Off-Duty Education of Active Military Personnel | 12,081 | 12,199 |
| HOUSING AND HOME FINANCE AGENCY | 0 | 250,000 |
| College Housing Loans[11] | 0 | 250,000 |
| LIBRARY OF CONGRESS | 1,368 | 1,619 |
| Reading Material for the Blind | 1,368 | 1,619 |

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[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 6.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Includes graduate loans.

[5] Program in operation but actual expenditures began in 1960.

[6] Office of Education estimate based on data provided by agency concerned.

[7] Includes graduate level.

[8] Payments to be used for roads and schools as determined by each State.

[9] Data not available.

[10] Less than $500.

[11] Reported on the basis of funds authorized. Actual loans approved were $155 million in 1959 and $172 million in 1960.

NOTE: Because of rounding, detail may not add to totals.

## Table A-18.—Federal Funds for Educational Services and Administration,[1] by Academic Level, Agency, and Program: Fisca Years 1959 and 1960

[Thousands of dollars]

| Academic level, agency, and program | 1959 | 1960[2] |
|---|---|---|
| **Total[3]** | **$317,516** | **$355,941** |
| **Adult Education** | **12,289** | **5,418** |
| VETERANS' ADMINISTRATION[4] | 12,289 | 5,418 |
| Readjustment Training Program | 12,889 | 5,418 |
| **Elementary-Secondary Level** | **287,545** | **325,777** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 7,400 | 15,000 |
| Secondary School Guidance, Counseling and Testing Services | 7,400 | 15,000 |
| DEPARTMENT OF AGRICULTURE | 275,945 | 305,512 |
| School Lunch Program | 275,945 | 305,512 |
| DEPARTMENT OF DEFENSE | 435 | 450 |
| Education of Dependents of Military Personnel | 435 | 450 |
| DEPARTMENT OF LABOR | 3,765 | 4,815 |
| Testing, Counseling, and Placement Interviews for High School Seniors | $3,765 | $4,815 |
| DISTRICT OF COLUMBIA | (5) | (5) |
| Education in Public Welfare Institutions | (5) | (5) |
| **Other Levels** | **17,682** | **24,747** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 15,940 | 23,856 |
| Administration of the Office of Education | 8,229 | 10,327 |
| Improvement of State Educational Statistical Services | 238 | 1,129 |
| Rural Library Services | 5,218 | 7,500 |
| Improvement in Science, Mathematics and Foreign Language Instruction | 1,350 | 4,000 |
| Howard University: Operation | 905 | 901 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 1 | 0 |
| Flight Research Center Training Program | 1 | 0 |
| OFFICE OF CIVIL AND DEFENSE MOBILIZATION | 1,741 | 891 |
| Operation of Civil Defense Schools | 529 | 575 |
| Support of State Training Programs in Civil Defense | 1,212 | 316 |

[1] Reported as "field of study not applicable" by respondents.

[2] Estimated by respondents.

[3] Includes Office of Education estimates for some programs. See footnote 4.

[4] Office of Education estimate based on data provided by agency concerned.

[5] Data not available.

NOTE: Because of rounding, detail may not add to totals.

## Table A-19.—Federal Funds for Education for Graduate Students, by Field of Study, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Field of study, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total[2]** | **$70,351** | **$82,930** |
| **Agricultural Sciences** | **564** | **663** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 0 | 91 |
| Research Fellowships, NIH | 0 | [3] 8 |
| NDEA Fellowships | (4) | 84 |
| DEPARTMENT OF STATE[5] | 402 | 443 |
| Study Grants, Educational Exchange Program | 402 | 443 |
| NATIONAL SCIENCE FOUNDATION | 163 | 129 |
| Graduate Fellowships | 75 | 79 |
| Postdoctoral Fellowships | 39 | 16 |
| Research Participation Grants | 0 | 3 |
| Science Faculty Fellowships | 46 | 32 |
| Secondary School Teacher Fellowships | 2 | 0 |
| **Biological Sciences** | **9,054** | **9,949** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 3,115 | 3,559 |
| Howard University: Curriculum | 423 | 435 |
| Research Fellowships, NIH | 2,691 | [3] 2,841 |
| NDEA Fellowships | (4) | 283 |
| DEPARTMENT OF STATE[5] | 251 | 277 |
| Study Grants, Educational Exchange Program | 251 | 277 |
| ATOMIC ENERGY COMMISSION | 499 | 630 |
| Fellowships in Biology and Medicine | 499 | 630 |
| NATIONAL SCIENCE FOUNDATION | $5,190 | $5,482 |
| Graduate Fellowships | 1,532 | 1,600 |
| Inservice Institutes for Teachers | 112 | 114 |
| Postdoctoral Fellowships | 751 | 689 |
| Research Participation Grants | 204 | 315 |
| Science Faculty Fellowships | 593 | 460 |
| Secondary School Teacher Fellowships | 350 | 450 |
| Summer Conferences for Teachers | 55 | 44 |
| Summer Institutes for Teachers | 1,592 | 1,810 |
| **Clinical Sciences** | **3,890** | **4,246** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 3,049 | 3,318 |
| Howard University: Curriculum | 574 | 630 |
| Education in Public Health Service Hospitals | 5 | 5 |
| Training Grants and Fellowships, Institute of Mental Health | 2,443 | 2,640 |
| Research Fellowships, NIH | 27 | [3] 43 |
| Nursing Education at St. Elizabeths Hospital | (6) | (6) |
| DEPARTMENT OF STATE[5] | 841 | 928 |
| Study Grants, Educational Exchange Program | 841 | 928 |
| **Education** | **701** | **1,872** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 11 | 1,110 |
| Fellowships in Programs for the Education of the Mentally Retarded | (7) | 1,000 |
| Research Fellowships, NIH | 11 | [3] 1 |
| NDEA Fellowships | (4) | 109 |

See footnotes at end of table.

## Table A-19.—Federal Funds for Education for Graduate Students, by Field of Study, Agency, and Program: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Field of study, agency, and program | 1959 | 1960 [1] |
|---|---|---|
| DEPARTMENT OF STATE [5] | $690 | $762 |
| Study Grants, Educational Exchange Program | 690 | 762 |
| **Engineering** | **4,757** | **5,549** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 16 | 156 |
| Research Fellowships, NIH | 16 | [3] 19 |
| NDEA Fellowships | (4) | 137 |
| DEPARTMENT OF DEFENSE | 812 | 789 |
| Education at Civilian Institutions for Army Personnel | 233 | 143 |
| Education at Civilian Institutions for Navy Personnel | 377 | 375 |
| U.S. Air Force Institute of Technology—Nonresident Training | 202 | 271 |
| DEPARTMENT OF STATE [5] | 1,456 | 1,607 |
| Study Grants, Educational Exchange Program | 1,456 | 1,607 |
| DEPARTMENT OF THE TREASURY | 48 | 82 |
| U.S. Coast Guard Officer Specialized | 48 | 82 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 34 | 77 |
| Ames Research Center Training Program | 13 | 32 |
| Langley Research Center Training Program | 13 | 25 |
| Lewis Research Center Training Program | 8 | 20 |
| Space Flight Center Training Program | 0 | 1 |
| NATIONAL SCIENCE FOUNDATION | 2,391 | 2,838 |
| Graduate Fellowships | 1,377 | 1,580 |
| Postdoctoral Fellowships | 64 | 102 |
| Research Participation Grants | 56 | 66 |
| Science Faculty Fellowships | 640 | 682 |
| Summer Conferences for Teachers | 28 | 30 |
| Summer Institutes for Teachers | 227 | 377 |
| **Physical Sciences** | **20,580** | **25,043** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 164 | 849 |
| Research Fellowships, NIH | 164 | [3] 330 |
| NDEA Fellowships | (4) | 520 |
| DEPARTMENT OF COMMERCE | (6) | (6) |
| Research and Training in the National Bureau of Standards | (6) | (6) |
| DEPARTMENT OF DEFENSE | 111 | 244 |
| Education at Civilian Institutions for Army Personnel | 111 | 244 |
| DEPARTMENT OF STATE [5] | 1,192 | 1,316 |
| Study Grants, Educational Exchange Program | 1,192 | 1,316 |
| DEPARTMENT OF THE TREASURY | 2 | (8) |
| U.S. Coast Guard Officer Specialized Training | 2 | (8) |
| ATOMIC ENERGY COMMISSION | 1,698 | 2,328 |
| Special Schools and Courses | 976 | 1,378 |
| Assistance to Schools in Reactor Technology | 296 | 400 |
| Fellowships in Nuclear Science and Engineering | 426 | 550 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 12 | 35 |
| Ames Research Center Training Program | (8) | 1 |
| Langley Research Center Training Program | 1 | 6 |
| Lewis Research Center Training Program | 10 | 21 |
| Space Flight Center Training Program | 0 | 7 |
| NATIONAL SCIENCE FOUNDATION | $17,402 | $20,269 |
| Academic Year Institutes for Teachers | 1,873 | 3,077 |
| Graduate Fellowships | 4,284 | 4,628 |
| Inservice Institutes for Teachers | 1,023 | 1,337 |
| Postdoctoral Fellowships | 986 | 961 |
| Research Participation Grants | 537 | 669 |
| Science Faculty Fellowships | 1,040 | 1,087 |
| Secondary School Teacher Fellowships | 994 | 731 |
| Summer Conferences for Teachers | 177 | 202 |
| Summer Institutes for Teachers | 6,488 | 7,578 |
| **Social Sciences** | **3,523** | **4,636** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 111 | 834 |
| Research Fellowships, NIH | 111 | [3] 221 |
| NDEA Fellowships | (4) | 612 |
| DEPARTMENT OF STATE [5] | 3,251 | 3,588 |
| Study Grants, Educational Exchange Program | 3,251 | 3,588 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | ---------- | (7) |
| Space Flight Center Training Program | ---------- | (8) |
| NATIONAL SCIENCE FOUNDATION | 162 | 215 |
| Graduate Fellowships | 117 | 198 |
| Postdoctoral Fellowships | 45 | 17 |
| **Other Fields of Study** | **27,246** | **30,898** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 258 | 6,199 |
| Howard Universtity: Curriculum | 158 | 268 |
| Research Fellowships, NIH | 101 | [3] 918 |
| NDEA Fellowships | (4) | 575 |
| Counseling and Guidance Institutes, NDEA | (4) | 2,306 |
| Research and Studies in Language Development, NDEA | (4) | 474 |
| Language Development Institutes, NDEA | (4) | 1,658 |
| DEPARTMENT OF DEFENSE | 614 | 530 |
| Education at Civilian Institutions for Army Personnel | 251 | 85 |
| U.S. Air Force Institute of Technology—Nonresident Training | 363 | 445 |
| DEPARTMENT OF STATE [5] | 4,468 | 4,931 |
| Study Grants, Educational Exchange Program | 4,468 | 4,931 |
| DEPARTMENT OF THE TREASURY | 6 | 12 |
| U.S. Coast Guard Officer Specialized Training | 6 | 12 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | 2 |
| Langley Research Center Training Program | 0 | 1 |
| Space Flight Center Training Program | 0 | 1 |
| NATIONAL SCIENCE FOUNDATION | 21,899 | 19,223 |
| Academic Year Institutes for Teachers | 6,914 | 6,134 |
| Inservice Institutes for Teachers | 806 | 797 |
| Research Participation Grants | 0 | 178 |
| Science Faculty Fellowships | 8 | 0 |
| Secondary School Teacher Fellowships | 129 | 120 |
| Summer Institutes for Teachers | 14,043 | 11,995 |
| **General Education** | **35** | **74** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 35 | 74 |
| Gallaudet College | 35 | 64 |
| Research Fellowships, NIH | 0 | [3] 10 |

[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 5.

[3] Includes awards for first 10 months of fiscal year 1960.

[4] Program in operation but actual expenditures began in 1960.

[5] Office of Education estimate based on data provided by agency concerned.

[6] Data not available.

[7] New program for 1960.

[8] Less than $500.

NOTE: Because of rounding, detail may not add to totals.

## Table A-20.—Federal Funds for Education for Undergraduate Students, by Field of Study, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Field of study, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total**[2] | **$419,396** | **$315,909** |
| **Agricultural Sciences** | **6,677** | **4,173** |
| NATIONAL SCIENCE FOUNDATION | 9 | 22 |
| Research Participation Grants | 9 | 22 |
| VETERANS' ADMINISTRATION[3] | 6,669 | 4,151 |
| Readjustment Training Program[4] | 6,424 | 3,913 |
| Vocational Rehabilitation Program[4] | 164 | 101 |
| War Orphans Educational Assistance[4] | 81 | 137 |
| **Biological Sciences** | **5,206** | **3,942** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 178 | 176 |
| Howard University: Curriculum | 178 | 176 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | (5) |
| Space Flight Center Training Program | 0 | (5) |
| NATIONAL SCIENCE FOUNDATION | 298 | 643 |
| Research Participation Grants | 298 | 643 |
| VETERANS' ADMINISTRATION[3] | 4,730 | 3,123 |
| Readjustment Training Program[4] | 4,453 | 2,901 |
| Vocational Rehabilitation Program[4] | 206 | 117 |
| War Orphans Educational Assistance[4] | 71 | 105 |
| **Clinical Sciences** | **14,699** | **9,777** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 206 | 243 |
| Education in Public Health Service Hospitals | 206 | 243 |
| Nursing Education at St. Elizabeths Hospital | (6) | (6) |
| VETERANS' ADMINISTRATION[3] | 14,494 | 9,534 |
| Readjustment Training Program[4] | 13,436 | 8,368 |
| Vocational Rehabilitation Program[4] | 511 | 414 |
| War Orphans Educational Assistance[4] | 547 | 752 |
| **Education** | **40,899** | **30,863** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 1,723 | 1,815 |
| Vocational Education | 1,570 | 1,665 |
| Howard University: Curriculum | 153 | 150 |
| Occupational Therapy Intern Training at St. Elizabeths Hospital | (6) | (6) |
| VETERANS' ADMINISTRATION[3] | 39,177 | 29,048 |
| Readjustment Training Program[4] | 36,114 | 25,947 |
| Vocational Rehabilitation Program[4] | 2,025 | 1,622 |
| War Orphans Educational Assistance[4] | 1,038 | 1,478 |
| **Engineering** | **60,445** | **41,541** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 189 | 202 |
| Howard University: Curriculum | 189 | 202 |
| DEPARTMENT OF COMMERCE | $2,574 | $2,900 |
| Merchant Marine Schools | 2,574 | 2,900 |
| DEPARTMENT OF DEFENSE | 348 | 375 |
| Education at Civilian Institutions for Army Personnel | 98 | 118 |
| U.S. Air Force Institute of Technology—Nonresident Training | 250 | 257 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | (5) |
| Space Flight Center Training Program | 0 | (5) |
| NATIONAL SCIENCE FOUNDATION | 50 | 263 |
| Research Participation Grants | 50 | 263 |
| VETERANS' ADMINISTRATION[3] | 57,284 | 37,801 |
| Readjustment Training Program[4] | 55,597 | 36,368 |
| Vocational Rehabilitation Program[4] | 1,133 | 682 |
| War Orphans Educational Assistance[4] | 553 | 752 |
| **Physical Sciences** | **17,947** | **13,792** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 295 | 257 |
| Howard University: Curriculum | 295 | 257 |
| DEPARTMENT OF DEFENSE | 8 | 72 |
| Education at Civilian Institutions for Army Personnel | 8 | 72 |
| NATIONAL AERONAUTICS AND SPACE ADMINISTRATION | 0 | (5) |
| Space Flight Center Training Program | 0 | (5) |
| NATIONAL SCIENCE FOUNDATION | 400 | 1,215 |
| Research Participation Grants | 400 | 1,215 |
| VETERANS' ADMINISTRATION[3] | 17,245 | 12,248 |
| Readjustment Training Program[4] | 16,708 | 11,685 |
| Vocational Rehabilitation Program[4] | 247 | 153 |
| War Orphans Educational Assistance[4] | 290 | 410 |
| **Social Sciences** | **12,166** | **9,189** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 128 | 136 |
| Howard University: Curriculum | 126 | 131 |
| Training Grants and Fellowships, Institute of Mental Health | 2 | 5 |
| NATIONAL SCIENCE FOUNDATION | 0 | 52 |
| Research Participation Grants | 0 | 52 |
| VETERANS' ADMINISTRATION[3] | 12,038 | 9,001 |
| Readjustment Training Program[4] | 11,552 | 8,510 |
| Vocational Rehabilitation Program[4] | 272 | 197 |
| War Orphans Educational Assistance[4] | 214 | 294 |
| **Other Fields of Study** | **138,789** | **95,220** |

**See footnotes at end of table.**

## Table A-20.—Federal Funds for Education for Undergraduate Students, by Field of Study, Agency, and Program: Fiscal Years 1959 and 1960—Continued

[Thousands of dollars]

| Field of study, agency, and program | 1959 | 1960[1] |
|---|---|---|
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | $570 | $625 |
| Howard University: Curriculum | 570 | 625 |
| DEPARTMENT OF DEFENSE | 1,022 | 1,567 |
| Cooperative Work-Study Program for Navy Employees | 429 | 383 |
| Education at Civilian Institutions for Army Personnel | 10 | 205 |
| Education at Civilian Institutions for Navy Personnel | 293 | 520 |
| U.S. Air Force Institute of Technology—Nonresident Training | 289 | 459 |
| NATIONAL SCIENCE FOUNDATION | 919 | 32 |
| Research Participation Grants | 919 | 32 |
| VETERANS' ADMINISTRATION [3] | 136,278 | 92,996 |
| Readjustment Training Program [4] | 130,895 | 87,800 |
| Vocational Rehabilitation Program [4] | 3,173 | 2,222 |
| War Orphans Educational Assistance [4] | 2,211 | 2,974 |
| **General Education** | **122,567** | **107,411** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | $676 | $10,173 |
| Gallaudet College | 676 | 671 |
| Student Loan Fund, NDEA [8] | (7) | 9,502 |
| DEPARTMENT OF DEFENSE | 42,469 | 42,499 |
| Education at Civilian Institutions for Navy Personnel | 3,966 | 4,113 |
| U.S. Air Force Academy | 15,770 | 15,882 |
| U.S. Military Academy | 12,401 | 12,112 |
| U.S. Naval Academy | 10,332 | 10,392 |
| DEPARTMENT OF THE TREASURY | 4,068 | 4,150 |
| U.S. Coast Guard Academy | 4,068 | 4,150 |
| VETERANS' ADMINISTRATION [3] | 75,354 | 50,589 |
| Readjustment Training Program [4] | 72,249 | 47,106 |
| Vocational Rehabilitation Program [4] | 1,145 | 880 |
| War Orphans Educational Assistance [4] | 1,960 | 2,603 |

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[1] Estimated by respondents.

[2] Includes Office of Education estimates for some programs. See footnote 3.

[3] Office of Education estimate based on data provided by agency concerned.

[4] Includes graduate level.

[5] Less than $500.

[6] Data not available.

[7] Program in operation but actual expenditures began in 1960.

[8] Includes graduate loans.

NOTE: Because of rounding, detail may not add to totals.

## Table A-21.—Federal Funds for Education for Professional Trainees, by Field of Study, Agency, and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Field of study, agency, and program | 1959 | 1960[1] |
|---|---|---|
| **Total** | **$63,383** | **$80,846** |
| **Agricultural Sciences** | **13** | **8** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 9 | 6 |
| Research Fellowships, NIH | 9 | [2] 6 |
| DEPARTMENT OF DEFENSE | 4 | 2 |
| Professional Training for Army Medical Service Officers | 4 | 2 |
| **Biological Sciences** | **16,296** | **25,591** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 16,042 | 25,357 |
| Training State and Local Officials in Food and Drug Inspection Techniques | ---------- | 3 |
| Experimental Training Grants to Medical Schools, NIH | 500 | 500 |
| Research Training Grants, NIH | 5,705 | 11,350 |
| Training Grants and Traineeships, Cancer Institute | 133 | 126 |
| Training Grants, Heart Institute | 1,664 | 1,819 |
| Training Grants, Institute of Allergy and Infectious Diseases | 942 | 1,941 |
| Training Grants, Institute of Dental Research | 238 | 557 |
| Training Grants and Fellowships, Institute of Mental Health | 870 | 1,167 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 1,523 | [2] 2,072 |
| Research Fellowships, NIH | 4,468 | [2] 5,824 |
| DEPARTMENT OF DEFENSE | 59 | 57 |
| Professional Training for Army Medical Service Officers | 32 | 27 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 21 | 21 |
| Professional Training for Air Force Medical Officers | 5 | 9 |
| ATOMIC ENERGY COMMISSION | 196 | 177 |
| Special Schools and Courses | 196 | 177 |
| **Clinical Sciences** | **31,756** | **36,426** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 31,515 | 36,158 |
| Training Grants and Traineeships, Cancer Institute | 797 | 868 |
| Training Grants, Heart Institute | 2,714 | 3,060 |
| Training Grants, Institute of Allergy and Infectious Diseases | 817 | 1,594 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Diseases | 265 | 358 |
| Training Grants, Institute of Dental Research | 412 | 516 |
| Training Grants and Fellowships, Institute of Mental Health | 11,207 | 13,075 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 4,116 | [2] 5,212 |
| Research Fellowships, NIH | 1,917 | [2] 1,695 |
| Traineeships for Public Health Personnel and Nurses | 5,935 | 5,733 |
| Resident and Intern Training in the Clinical Sciences at St. Elizabeths Hospital | 121 | 181 |
| Training State Personnel in Maternal and Child Health Programs | 1,532 | 1,586 |
| Rehabilitation Training Grants, OVR | 1,684 | 2,280 |
| DEPARTMENT OF DEFENSE | 240 | 267 |
| Professional Training for Army Medical Service Officers | 21 | 33 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 170 | 175 |
| Professional Training for Air Force Medical Officers | 49 | 59 |
| **Education** | **255** | **370** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 241 | 360 |
| Training Grants, Heart Institute | 210 | 301 |
| Research Fellowships, NIH | 31 | [2] 59 |
| DEPARTMENT OF DEFENSE | 14 | 10 |
| Professional Training for Army Medical Service Officers | 14 | 10 |
| **Engineering** | **211** | **343** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 37 | 103 |
| Training Grants, Heart Institute | 36 | 99 |
| Research Fellowships, NIH | 1 | [2] 3 |
| DEPARTMENT OF DEFENSE | ([3]) | ([3]) |
| Medical Training for Navy Personnel in Civilian Medical Schools | ([3]) | ([3]) |
| ATOMIC ENERGY COMMISSION | $174 | $240 |
| Special Schools and Courses | 174 | 240 |
| **Physical Sciences** | **483** | **657** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 247 | 349 |
| Training State and Local Officials in Food and Drug Inspection Techniques | ---------- | 3 |
| Research Fellowships, NIH | 247 | [2] 346 |
| DEPARTMENT OF COMMERCE | 145 | 279 |
| Research and Training in the National Bureau of Standards | 104 | 206 |
| Training Foreign Meteorologists | 41 | 72 |
| DEPARTMENT OF DEFENSE | 23 | 18 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 23 | 18 |
| ATOMIC ENERGY COMMISSION | 68 | 12 |
| Special Schools and Courses | 68 | 12 |
| **Social Sciences** | **5,748** | **6,976** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 5,662 | 6,878 |
| Training Grants and Fellowships, Institute of Mental Health | 3,650 | 4,292 |
| Research Fellowships, NIH | 62 | [2] 57 |
| Rehabilitation Training Grants, OVR | 1,950 | 2,529 |
| DEPARTMENT OF COMMERCE | 82 | 89 |
| Training Foreign Census Technicians | 82 | 89 |
| DEPARTMENT OF DEFENSE | 5 | 9 |
| Professional Training for Army Medical Service Officers | 4 | 8 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 1 | 1 |
| **Other Fields of Study** | **8,540** | **10,416** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 5,998 | 6,889 |
| Rehabilitation Research Fellowships, OVR | 42 | 103 |
| Training at the Robert A. Taft Sanitary Engineering Center | 318 | 476 |
| Research Fellowships, NIH | 149 | [2] 1,943 |
| Traineeships for Public Health Personnel and Nurses | 2,561 | 3,074 |
| Chaplain training at St. Elizabeths Hospital | [4] 3 | [4] 6 |
| Training State Personnel in Child Welfare Agencies | 1,133 | ([5]) |
| Training State Personnel in Public Assistance Agencies | 669 | ([5]) |
| Rehabilitation Training Grants, OVR | 1,123 | 1,288 |
| DEPARTMENT OF DEFENSE | 2,528 | 3,511 |
| Professional Training for Army Medical Service Officers | 92 | 128 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 19 | 22 |
| Professional Training for Air Force Medical Officers | 17 | 17 |
| U.S. Air Force Institute of Technology—Nonresident Training | 2,400 | 3,344 |
| FEDERAL DEPOSIT INSURANCE CORPORATION | 14 | 16 |
| Employee Training in Bank Examining and Auditing | 14 | 16 |
| **General Education** | **0** | **60** |
| DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE | 0 | 60 |
| Research Fellowships, NIH | 0 | [2] 60 |

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[1] Estimated by respondents.
[2] Includes awards for first 10 months of fiscal year 1960.
[3] Less than $500.
[4] Data incomplete.
[5] Data not available.

NOTE: Because of rounding, detail may not add to totals.

## Table A-22.—Federal Funds for Higher Education, Excluding Research and Property Transfers,[1] by Agency and Program: Fiscal Years 1959 and 1960

[Thousands of dollars]

| Agency and program | 1959 | 1960 [2] |
|---|---|---|
| **Total [3]** | **$583,075** | **$770,403** |
| **Department of Health, Education, and Welfare** | **88,919** | **132,490** |
| Gallaudet College | 834 | 1,060 |
| Howard University: Construction | 286 | 881 |
| Howard University: Operation | 1,475 | 1,476 |
| Howard University: Staff Expenses | 209 | 209 |
| Howard University: Curriculum | 2,667 | 2,874 |
| Training State and Local Officials in Food and Drug Inspection Techniques |  | 6 |
| Instruction in Land-Grant Colleges and Universities | 5,052 | 5,052 |
| Vocational Education | 1,570 | 1,665 |
| Fellowships in Programs for the Education of the Mentally Retarded | (4) | 1,000 |
| Student Loan Fund, NDEA | (4) | 9,619 |
| NDEA Fellowships: Institutional Grants | (4) | 2,350 |
| NDEA Fellowships | (4) | 2,320 |
| Counseling and Guidance Institutes, NDEA | (4) | 3,388 |
| Research and Studies in Language Development, NDEA | (4) | 974 |
| Language Development Institutes, NDEA | (4) | 2,566 |
| Rehabilitation Research Fellowships, OVR | 42 | 103 |
| Rehabilitation Training Grants, OVR | 4,757 | 6,097 |
| Education in Public Health Service Hospitals | 211 | 248 |
| Training at the Robert A. Taft Sanitary Engineering Center | 318 | 476 |
| Experimental Training Grants to Medical Schools, NIH | 500 | 500 |
| Research Training Grants, NIH | 5,705 | 11,351 |
| Training Grants and Traineeships, Cancer Institute | 5,910 | 6,604 |
| Training Grants, Heart Institute | 7,232 | 7,790 |
| Training Grants, Institute of Allergy and Infectious Diseases | 1,758 | 3,535 |
| Training Grants and Traineeships, Institute of Arthritis and Metabolic Diseases | 2,256 | 4,385 |
| Training Grants, Institute of Dental Research | 650 | 1,073 |
| Training Grants and Fellowships, Institute of Mental Health | 19,892 | 22,640 |
| Training Grants and Traineeships, Institute of Neurological Diseases and Blindness | 5,638 | [6] 7,284 |
| Research Fellowships, NIH | 10,003 | [6] 14,384 |
| Traineeships for Public Health Personnel and Nurses | 8,496 | 8,807 |
| Chaplain Training at St. Elizabeths Hospital | [7] 3 | [7] 6 |
| Resident and Intern Training in the Clinical Sciences at St. Elizabeths Hospital | [2] 121 | 181 |
| Training State Personnel in Maternal and Child Health Programs | 1,532 | 1,586 |
| Training State Personnel in Child Welfare Agencies | 1,133 | (8) |
| Training State Personnel in Public Assistance Agencies | 669 | (8) |
| **Department of Commerce** | **3,493** | **4,384** |
| Research and Training in the National Bureau of Standards | 104 | 207 |
| Training Foreign Census Technicians | 82 | 89 |
| Merchant Marine Schools | 3,266 | 4,016 |
| Training Foreign Meteorologists | 41 | 72 |
| **Department of Defense** | **48,231** | **50,040** |
| Professional Training for Air Force Medical Officers | 72 | 85 |
| U.S. Air Force Academy | 15,770 | 15,882 |
| U.S. Air Force Institute of Technology—Nonresident Training | 3,504 | 4,776 |
| Professional Training for Army Medical Service Officers | 168 | 208 |
| Education at Civilian Institutions for Army Personnel | 710 | 867 |
| U.S. Military Academy | 12,401 | 12,112 |
| Education at Civilian Institutions for Navy Personnel | 4,636 | 5,008 |
| Medical Training for Navy Personnel in Civilian Medical Schools | 233 | 237 |
| Federal Council on Medical Education for National Defense Program | $405 | $473 |
| U.S. Naval Academy | 10,332 | 10,392 |
| **Department of State** | **18,720** | **20,661** |
| Study Grants, Educational Exchange Program [9] | 12,551 | 13,852 |
| Teaching and Teacher Training Grants, Educational Exchange Program [9] | 4,152 | 4,582 |
| University Teaching Grants, Educational Exchange Program [9] | 2,017 | 2,227 |
| **Department of the Treasury** | **4,124** | **4,245** |
| U.S. Coast Guard Academy | 4,068 | 4,150 |
| U.S. Coast Guard Officer Specialized Training | 56 | 95 |
| **Atomic Energy Commission** | **6,371** | **7,829** |
| School Equipment and Teacher Training | 1,367 | 1,919 |
| Fellowships in Biology and Medicine | 499 | 630 |
| Special Schools and Courses | 3,674 | 3,630 |
| Assistance to Schools in Reactor Technology | 405 | 1,100 |
| Fellowships in Nuclear Science and Engineering | 426 | 550 |
| **Federal Deposit Insurance Corporation** | **14** | **16** |
| Employee Training in Bank Examining and Auditing | 14 | 16 |
| **Housing and Home Finance Agency** | **0** | **250,000** |
| College Housing Loans [10] | 0 | 250,000 |
| **National Aeronautics and Space Administration** | **46** | **122** |
| Ames Research Center Training Program | 13 | 33 |
| Flight Research Center Training Program | 1 | 2 |
| Langley Research Center Training Program | 14 | 33 |
| Lewis Research Center Training Program | 18 | 44 |
| Space Flight Center Training Program | 0 | 10 |
| **National Science Foundation** | **49,887** | **52,132** |
| Academic Year Institutes for Teachers | 8,787 | 9,211 |
| Graduate Fellowships | 7,385 | 8,086 |
| Inservice Institutes for Teachers | 1,942 | 2,248 |
| Postdoctoral Fellowships | 1,884 | 1,785 |
| Research Participation Grants | 2,472 | 4,134 |
| Science Faculty Fellowships | 2,327 | 2,261 |
| Secondary School Teacher Fellowships | 1,475 | 1,300 |
| Special Field Institutes Grants | 233 | 223 |
| Special Projects in Science Education | 301 | 311 |
| Summer Conferences for Teachers | 260 | 276 |
| Summer Institutes for Teachers | 22,348 | 21,759 |
| Supplementary Training for Science Teachers | 473 | 538 |
| **Veterans' Administration** | **363,268** | **248,492** |
| Readjustment Training Program [9] | 347,427 | 232,598 |
| Vocational Rehabilitation Program [9] | 8,875 | 6,389 |
| War Orphans Educational Assistance [9] | 6,966 | 9,505 |

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[1] Excludes research grants and contracts and value of surplus property transferred to educational institutions.

[2] Estimated by respondents.

[3] Includes Office of Education estimates for some programs. See footnote 9.

[4] New program in 1960.

[5] Program in operation but actual expenditures began in 1960.

[6] Includes awards for first 10 months of fiscal year 1960.

[7] Data incomplete.

[8] Data not available.

[9] Office of Education estimate based on data provided by agency concerned.

[10] Reported on the basis of funds authorized. Actual loans approved were $155 million in 1959 and $172 million in 1960.

NOTE: Because of rounding, detail may not add to totals.

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